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THE

INTRODUCTORY LECTURE

TO A COURSE ON THE

PRINCIPLES AND PRACTICE OF MEDICINE,

Delivered by Dr. AYRE, at the

Medical Theatre, Dean-street, Borough.

GENTLEMEN,

I NOW appear before you to commence a Course of Lectures on the Principles and Practice of Medicine; or, in other words, to instruct you in the knowledge of disease, and of the means for its removal, prevention, or alleviation. Before, however, proceeding to the proper business of the course, it will be well to devote this preliminary lecture to the inquiry, as to what constitutes a knowledge of disease, and what are the causes which have so long retarded its advancement, and what the means for promoting it. Lord Bacon's remark, that "knowledge is power," is a truth of universal application, and is, therefore, as true in relation to the treatment of disease, as to the exercise of political rule, to which his observation was directed. Seeing, therefore, that knowledge is power, it is of importance to know what constitutes this knowledge, and what are the means of attaining it; for mankind, during every period of their history, have erred in their notions concerning the nature of true knowledge, and have been misled by names, and by the authority which imposed them; and have been prone to believe, that by knowing the name of an object, they thereby possessed a knowledge of the nature of it; and this error has peculiarly prevailed in medicine, and men have given names to diseases from some fanciful notion formed of them, and which, by being secured as the true representatives of the things they denoted, have been adopted by succeeding generations as a rule for their reasonings and their practice.

Now there are, in regard to most objects, two sorts of knowledge, and which differ not only in degree, but in *kind*. Our knowledge of a natural object, as for instance of a piece of granite, may be limited to its sensible appearances or qualities, as its hardness, colour, &c.; or it may extend to its constituent parts or principles. The first kind of knowledge, or that of its sensible qualities, may be obtained by the most careless observer; and if any difference exist in regard to this kind of knowledge, it will be only in degree. Thus of a natural body as of the granite; the labourer at the quarry will have, perhaps, a somewhat more correct knowledge of its sensible qualities than the man who breaks it in our streets; whilst the knowledge of this last will exceed, perhaps, the passengers who casually witness his doing it. The knowledge, however, of all these persons is the same, the difference being only in degree. There is, therefore, another kind of knowledge, differing essentially from that of the persons just alluded to. This pertains to its constituent parts, or principles, and which it is the province of the chemical philosopher to acquire; for by the skill exercised by him in analysing bodies, he shows that resemblances exist between many substances, which, judging by their external appearance, are in no way alike; and, by the same method, he detects discrepancies in others that had previously been thought to be the same. Now the knowledge we possess of disease may differ in the same way, that is to say, not only in degree, but in *kind*. We may know a disease by its external signs or symptoms, as a natural body is known by its sensible qualities, and yet be utterly unacquainted with its true nature. Thus, few persons who have read a description of hydrophobia, as exhibited in the human subject, and none who have once seen it, could fail to recognise it when presented to them; yet our knowledge of the disease amounts to nothing, and is, in regard to its true nature, no more than what the labourer possesses with respect to the granite, since in both it relates only to their sensible appearances. There is, therefore, a second species of knowledge of disease, and which, like the

knowledge possessed by the chemist, has respect to the relation the symptoms bear to each other, and to their common cause, and to the pathological conditions upon which they depend. The first sort of knowledge, or that concerning the sensible appearances of disease, is what the uninstructed attendants upon the sick, whether unskilful doctors or nurses, have at all times possessed; and the knowledge, whether it be with doctors or nurses, is intrinsically the same, the difference being only in degree. They are but labourers in a quarry, when compared with the enlightened pathologist, whose knowledge of disease is of the true kind, and whose office it is, like that of the chemist in his laboratory, to investigate the causes which produce and modify diseases, and those conditions of the body to which they give, and from which they derive, their origin.

Seeing, therefore, that there are two kinds of knowledge, and which differ essentially from each other, we may now inquire as to what are the methods by which the true and more important branch of knowof disease can be obtained. To satisfy this inquiry, let us imagine the existence of an island in some distant part of the world, and unknown to the rest of it, and whose inhabitants were conversant with most of our arts and sciences, and where scientific men employed the inductive method of research first taught us by Lord Bacon. Let us imagine, no matter how, that some chronometers, with which they were before unacquainted, came into their possession, and that one of them becoming deranged in its state of going, was given to their ablest artists for repair; what, I will ask, would be the plan they would adopt? Would they limit their examination to the dial-plate and pendulum? or, because the movement of the pointers was the final cause of its construction, would they seek only in these for the cause of its imperfect action, and apply there alone the remedy? Would they not rather examine a perfect time-piece of the same kind, by which they might make themselves acquainted with its several parts, and their relations to each other, and the principle upon which they moved in concert, and be thus enabled to detect and remove the causes which impaired the action of the imperfect one. But let us farther suppose, that these enlightened islanders became suddenly assailed with the several diseases known to Europeans, and from which they before had been exempt, and that the scientific men among them were required to apply their minds to the discovery of a mode of removing them. What, I may again ask, would be the plan they would pursue? Would they, in imitation of those ancients whom a misplaced and indiscriminate regard for antiquity has led us to reverence as our masters, commence their task by forming a nomenclature of the diseases from some hypothetical notions regarding their seat or origin? and determine the nature of their proximate causes from some loose analogies derived from chemical or mechanical phenomena, or from other spurious sources, and in utter ignorance of the structure of the parts concerned in the disease, or of the morbid changes induced in them by it? endeavouring, at the same time, in imitation of more modern improvers of our art, to settle immediately, in a nosological arrangement, the notions thus vaguely acquired of the nature of these diseases? Assuredly they would not: on the contrary, they would, like the mechanic repairing the chronometer, begin their task by examining the internal structure of the human body in its sound state. They would examine, with the minutest scrutiny, the various organs, and the tissues of which they are composed, and their relative situation and dependencies; in short, and without detaining you with a detail of the several objects of it, they would study anatomy. Having thus acquired a knowledge of the *structure* of the body, they would next proceed to investigate the uses of the several organs, and the parts connected with and composing them. They would analyse the blood, and determine the mode and purposes of its circulation. They would analyse the several secretions and excretions in their morbid and healthy states, and examine into the particular circumstances under which, and by which, they were altered in their quantity and quality; they, in fact, would study physiology; and next, in pursuance of their plan of investigating the causes and seat of disease, they would proceed to ascertain, by morbid dissections, the nature of the morbid changes produced in the solids by disease, comparing them with the symptoms and with the causes producing these, as diligently noted in the course of it; and thus determining the true relation of the symptoms with each other and with their common cause, as well as the effects produced on them by the treatment. From the observations thus made and repeatedly confirmed, certain general rules of practice would be deduced, which would be denominated the Principles of Physic; and a just pathology of diseases being thus acquired, a nosological arrangement of them would be made, and as perfect a system of practice established, as the mortal destiny of their nature would admit.

Thus then would men proceed who understood the inductive mode of research taught by Lord Bacon, and who, from being unbiassed by those prejudices which are perpetually intercepting our views of truth,

would have less to learn from having nothing to unlearn. And is this the mode which the ancients pursued, and did they possess that true and efficient knowledge of disease to which I have alluded? Certainly not. They possessed little more than the first kind, in that which is limited to the sensible appearances or symptoms of a disease; for the philosophy of the ancients proved itself unsuited for scientific research; and it was not until the time of Lord Bacon that the method became known, and not until long after that period that it was adopted by the teachers of our art. But the ancients are not chargeable merely with neglecting the right mode of proceeding in their investigations; for they were guilty of the injurious practice of giving names to diseases which involved some false hypotheses regarding their nature, and of sanctioning at once, the names and the hypotheses by the systematic arrangements of disease which they founded on them. First, it must be obvious that a name which gives an erroneous notion of the object it represents, must give an injurious bias to the mind, in favour of that notion; and that, as a systematic arrangement of diseases should be formed upon a knowledge of their nature, every arrangement of them, before such knowledge is attained, must be injurious, being wrong, in at least as great proportion as it would have been beneficial if right. And yet the history of physic is but an humiliating record of such attempts, and of the evils which sprang from them, by withholding men's minds from the true path of investigation, and accustoming them to regard the systems thus imposingly formed, as legitimate deductions from facts. In this way the authority of Galen enchained the minds of men for nearly fifteen centuries, when they were released by Paracelsus, and afterwards from him by others, to continue in a bondage little inferior to that which they had left. The error with all was, that of creating systems of medicine unsustained by the facts which anatomy and physiology, and morbid dissections, should have afforded, and arranging diseases according to their crude fancies; and thus, of giving "a local habitation and a name" to existences purely ideal. It would be a task, neither of profit nor amusement, to enumerate to you the various theories which have been given to the world by their successive authors, from the days of Hippocrates to a period near to our own times. Many of them are too absurd to merit a serious notice, and they all have the radical defect of being, not only not supported by facts, but opposed to them. But let me not be unjust to the ancients. If, as it must be admitted, they did but little for our art, the wonder is, still, with the scanty means they used, that they did so much; and for their errors, there are reasons of extenuation not due to the modern inventors of theories. To their success there were opposed the prejudices against dissection, derived from their religion, and unknown to modern times. They wanted the aid of the collateral arts and sciences, and of the printing-press and paper, both of such transcendent importance for the wide diffusion of facts, by which alone science can be advanced. With the ancients, then, the error was in erecting systems of physic, without seeking for facts to uphold them. With the moderns, possessing as they did, such ample means for detecting their fallacy, in following them so long and so blindly, or in substituting systems of their own, equally remote from truth. Nor are we, at the present day, free from the charge of yielding to that bias, which names, and systems of medicine, and nosological arrangements in past times produced on us. There is still lingering in our seats of learning an undue attachment, to speak in the mildest way of it, for opinions and modes of practice, which a pathology much less enlightened than ours should before this time have exploded. We have still a nosological arrangement of diseases, which is appealed to as an authority, and as the rule for our reasoning and practice; though it is, and must be, essentially defective as such. For in a nosological arrangement of diseases, it is necessarily assumed that the nature of the diseases thus arranged is understood; and that the arrangement is made in accordance with this knowledge, and that our acquaintance with diseases may be thereby facilitated. But the nature of many of the diseases thus arranged, is confessedly unknown; and the views concerning a multitude of others, and upon which their arrangement is founded, is erroneous; and if, therefore, the arrangement be formed, (and to be of any service, it must be so,) as our authority and guide in judging of, and treating diseases, then this and all other settled arrangements of them, made before a true knowledge of them is obtained, must be as injurious in practice, as they are unscientific. We all know how in chemistry the attempts at arranging the objects of that science, and of forming a nomenclature of them, required successive renewals, from successive discoveries concerning the nature of those objects; and that therefore repeated changes were made in their names, in correspondence with the improved knowledge respecting them. It must, therefore, happen, that evils, both theoretical and practical, must arise from an adherence to names, and to artificial arrangements of diseases, under an imperfect knowledge of their nature. But let me not here be misunderstood. I object not to nosological

arrangements in the abstract. I object only to the premature formation of them; and to their thus preceding, instead of following, the discovery of a true pathology of diseases. Neither do I object to some of the arrangements made by Dr. Cullen, in his system of nosology; but I insist upon its injurious tendency as a whole, since, in many cases, it implies what is not proved, and in many others, gives the seal and sanction to opinions which are false; tending thus by its authority to perpetuate errors which must have an injurious influence upon our practice. Indeed, the system was founded on opinions entertained by its author, regarding the proximate causes of diseases, and which are now pretty generally abandoned; and hence, with the abandonment of the opinions respecting them, we must now abandon the system of which those opinions were the support.

But I will not, for I need not, pursue this subject further; for the whole fabric of medical opinions, ancient and modern, with the systems of medicine founded on them, has been shaken to its foundation by the labours of recent inquirers, and is rapidly falling into ruins. The French pathologists, following the path marked out to them by our enlightened countryman John Hunter, have set us an example of diligent and successful research into pathological anatomy. By the investigations prosecuted by them into the structure of the several tissues of the body, of their uses or functions, of their particular morbid states, and of the diagnostic signs by which these last are severally distinguished, we have afforded us the prospect of possessing a large supply of materials for the building up of an efficient and natural pathology. In the race, indeed, which they are running, they promise to outstrip the competitors of all other nations, and, perhaps, not least those of our own; for to other causes favouring their success, they have those opportunities for frequent morbid dissection, which are so necessary for improvement in the knowledge of disease, but which are, in a great measure, denied to us, through the effects of popular prejudice, and the absurd enactments of our legislature; and, I regret having to add, through the seeming countenance afforded to both, by the highest of our chartered bodies confining the exercise of its corporate power and influence to purposes, which are as unconnected with the interests of our art, as they are foreign to the intentions of of its founders.

Though all these obstacles, it is reasonable to hope, will, ere long, give way to the impulse of a more enlightened and liberal mode of thinking amongst us; and when, in the improvement of our art, as in so many of the other great improvements of the age, we may set an example, instead of having to follow one; and thus contribute our share to that distinction which our country has attained, by her pre-eminence in the arts and sciences, by her literature, by the glory of her arms, and by the free institutions which she cherishes.

But to return to our subject. In the observations which I made upon the nature of a true knowledge of disease, I stated to you that a mere acquaintance with its symptoms does not constitute that knowledge; and I have now to add, that though not the whole, yet it forms a part, and a very necessary part, of that knowledge, and must be assiduously sought for by clinical observation and practice. For a disease is not a single phenomenon, which may be rendered fully cognizable by description; but it is made up of symptoms, the relation of some of which to each other, and to their common cause, is often remote. Thus, to distinguish between the fever of acute rheumatism, and that of typhus, would demand from us but little acquaintance with disease: but the claim upon our experience does not end here; for, in the treatment of the latter complaint, we have to distinguish those symptoms which are contingent, from those which are proper to it; the signs of that debility which precedes and attends the excitement, from that which accompanies its decline; the delirium of excessive local vascular action, from that resulting from the morbid diminution of it; and thus to decide upon the important points, when to subtract from the general strength, and when to add to it, with the due discrimination of that multitude of symptoms which collectively form the disease, and which require to be appreciated, individually, in regard to the influence which each exerts in retarding or preventing its favourable termination. To attempt to acquire this necessary but difficult knowledge of disease by books, or lectures alone, would be a fruitless task; for, with whatever accuracy a disease may be described, there is no language, however select or studied it may be, that can convey an adequate notion of those nice but discriminating marks which are discoverable in the countenance and manner of a patient, and which serve as guides to the practised observer to conduct him through that obscurity which the complexity of its symptoms, and the variety of its forms, so frequently involve disease. A book, therefore, containing a description of the symptoms of a disease, must be employed no otherwise than as his guide, which is to direct him into the more ready observation and acquaintance with them. It is his map, or chart, and which, like that of a town, he must use as such; imitating, in this, the conduct of the traveller, who, desirous of

becoming informed of the local peculiarities of the streets and houses of a city, traverses himself the place, and only uses the plan he has of it to facilitate and direct his examination of them. It is knowledge thus acquired, which forms what we term experience; and which consists of a facility in detecting the presence of a disease, by an observation of its symptoms, combined with an accurate understanding of the pathological conditions upon which it depends, and of the method by which it should be treated. Experience, without these latter qualifications, would be merely the experience of nurses; and would be, at once, both barren and unprofitable to its possessor.

You will collect from the observations which I have made, that there is a true and a fictitious kind of knowledge; the one being limited to the sensible appearances or symptoms of a disease, the other embracing this, together with the pathological conditions upon which it depends. That this, the true knowledge, is founded on the knowledge of anatomy, physiology, and pathological anatomy, united to the diligent study of disease, and of the effects of medicine, as acquired at the bedside; for, as the principles of medicine are but deductions from facts, it is only by the acquisition of facts that these can be established. And, lastly, that a nosological arrangement of diseases must follow, and not precede the acquirement of their true pathology; and must thus be reserved, like the placing of the key-stone of an arch, as the finishing act of the builder; for, to continue the figure, its earlier employment would only encumber the workmen, without adding either grace or stability to the structure.

And now, Gentlemen, let me address you more particularly as students who are just entering upon the study of your profession. Your object is to acquire a knowledge of disease. Lord Bacon has said, that "knowledge is power." You are, therefore, in search of power—of power which is to enable you to subdue disease, and thereby diminish human suffering. To these motives for diligence, no other considerations need be added; for it cannot be overlooked, that in the exercise of your profession you will be under the strongest obligation to discharge its duties faithfully, for your responsibility will be indeed great. To you life and health will be entrusted, and you will accept the trust under an implied compact with your patient, that you shall receive a reward for your skill, and that, in return, the skill that you will exercise shall be efficient, and merit the reward. Let it not, therefore, lay as an abiding weight upon your consciences, that, having the means, you neglected to acquire the necessary skill, and ventured upon the trust without it. To you who shall acquire this knowledge, (and you all may acquire it,) it will be to you as power; and not merely in relation to the control it will give you over disease, but as procuring for you that highest of earthly enjoyments, self approbation; as fulfilling the expectations which your friends have formed of you; and as the means of procuring you an honourable independence, with the numberless enjoyments which flow from it; together with that distinction which attaches to every one engaged in our profession, who exercises it honourably and skilfully. Let me then urge you to the same diligence in your studies, as if the whole burden shall hereafter lay upon you of its farther improvement. It is only by aiming at such that any excellence can be attained. The field of medical research is open to you all, and it invites you all to its cultivation; and it is to you, as part of the rising generation, and as students of medicine, and ere long to be practitioners in it, that the invitation is especially given. Nor can the task, however laboriously pursued, prove to you an unprofitable one; since to you it will yield its own high reward, in storing your minds with still more knowledge, and thus endowing you with still more of that power which is demanded for the treatment of disease. To most of you the attainment of these objects will, and must be the proper limit of your endeavours and of your desires. To some of you, however, higher objects will be kept in view and aimed at; for though the temple of Fame be placed upon the highest of earth's eminences, and her imperishable wreaths upon the highest part of the temple, there are those who will aspire to their possession. To such, if any such be here before me, I would say, Go on in your career of honourable toil, alike regardless of the allurements that might tempt you from your path, or the obstructions that might impede you in it. Your toil, and the objects of it, will be equally worthy of you; for in your labour to explore the yet undiscovered operations of nature, there is no assignable limit to the services with which you may benefit mankind. And as for the reward of your labour, you will seek it, not merely in the reputation and wealth which will accrue to you as the valued practitioners of your districts, but in that noblest of all human rewards, the consciousness of deserving one, and in that highest of all human distinctions, of having your names united with those who have been justly regarded as the benefactors of the world, and the pride and ornament of their country.

ABSTRACT OF

DR. ROGET'S

INTRODUCTORY LECTURE ON PHYSIOLOGY,

Delivered at the New Medical Theatre in Aldersgate-street, October 3d, 1826.

Dr. Roget began by observing, that the human body, in common with all living beings, offers a series of phenomena having a totally different character from those presented by inanimate matter. He then proceeded to specify those peculiar and characteristic properties which organized structures have received in addition to the ordinary properties possessed by all material bodies. Those peculiarities of arrangement and mechanical contexture of fibres and laminæ, and that symmetrical disposition of parts, adapted to particular objects and purposes, which combine to constitute our ideas of an organized structure, were severally pointed out; as also the remarkable modifications of chemical properties which distinguish the products of organization from those of the mineral kingdom. The series of changes which living beings exhibit was next pursued in their origin from the scarcely perceptible atoms, which constitute the rudiments of both animals and vegetables; and in their progress in different stages of development, consolidation, enlargement, and successive additions of organs, till the whole of the elaborate structure is finally completed. The growth of an organized being was described as a process totally different from the increase of a mineral body, the latter being the result of the simple law of aggregation operating among particles which are thrown together in a fluid form, or in a state allowing of the action of this power. Under these circumstances they assume certain regular geometric forms, and compose crystals of various shapes and dimensions. The mode in which crystalline bodies acquire their augmentation of size by the accretion of new layers of materials, was explained and illustrated by diagrams representing the arrangements of primitive elementary crystals, by which their various secondary forms are built up. It was then shown that the growth of an animal or vegetable is a process of a nature totally different from, and bearing no analogy with, crystallization. This led Dr. Roget to criticise the celebrated definitions of the three kingdoms of nature given by Linnæus, namely, that *minerals grow, vegetables grow and live, animals grow, live, and feel*; definitions that were founded on an implied analogy of this kind, which does not in reality exist. Dr. Roget next adverted to the powers of accommodation to external circumstances, to the action of foreign agents, and to the capabilities of repairing injuries, which are inherent in a greater or less degree in every species of organized and living being. Limits, however, exist to these powers; and the duration of life itself cannot, even under the most favourable circumstances, be prolonged beyond a certain period. The phenomena attendant upon the decline of the vital energies, the dissipation of the fluids and hardening of the solid fibres of the body; and their resolution into their primitive chemical elements, on the cessation of that power by which they had been retained in union, were severally considered. Lastly, those faculties were adverted to by which the continuance of the race, and the multiplication of its numbers, are secured.

After having taken a review of the leading phenomena of life, Dr. Roget next inquired into the proper mode by which their study should be conducted. It is the object of the physical sciences, including natural philosophy and chemistry, to reduce the facts which they embrace to the smallest possible number of general laws; but numerous obstacles present themselves to the attainment of this end in the science of physiology. The nature of these obstacles was stated and illustrated, and a striking contrast drawn between the simplicity, the constancy, and the uniformity of those physical forces which actuate unorganized matter, and the complexity, variety, and extended chains of connexion that pervade every part of organic nature. Instead of being resolvable into the operation of a single principle, in the same way as the movements of the celestial bodies are reducible to the simple law of gravitation, life was shown to imply the agency of a number of different principles, which exhibit a gradation of ascent, or of remoteness from the ordinary powers of matter. This was exemplified in the mechanical properties of cohesion and of electricity, which are modified in a very peculiar manner in organic products, in consequence of the singularly complex arrangement of the elements constituting the texture of every part of an animal body. In addition to these properties, a new power is supplied, which is quite peculiar to animal life, namely, muscular contractibility, and which appears to have been established in the system as the great source of mechanic power required for the movements of the machine. The peculiarities of those chemical agencies which are

in operation during life, and which differ from what we elsewhere observe, either in the works of nature, or in the productions of human art, were next pointed out. The several powers which are specially connected with the organization of the nervous system were indicated, and their general effects considered.

Dr. Roget complained that what may be termed the philosophy of physiology, namely, the inquiry into the nature of those physical powers which are in operation in the living body, has not hitherto been investigated with the attention it deserves; and that the cultivators of the science have, in their excessive eagerness to arrive at comprehensive results, been, in general, guilty of premature and unwarrantable generalizations.

Baffled in his attempts to obtain an insight into the real physical laws which govern the phenomena of life, the physiologist will naturally turn to the contemplation of another aspect, under which the same phenomena may be viewed. Independently of the relation of cause and effect by which they, in common with all the events we witness, are connected, they also stand, with regard to one another, in the relation of means to an end: they are all strongly impressed with the character of *intention*. Thus one of the principal objects of physiology is the study of the *functions* of life; that is, the purposes to which the several structures of the body, and their different actions, are subservient in the animal economy. The study of anatomy, indeed, derives its chief interest from its connexion with physiology. In vain may we engage in the examination of the form and structure of all the parts which compose the animal machine, unless they are viewed with reference to their uses. Mere dissection can afford us no instruction, unless aided by the light of physiology. A lively interest is thus infused in a subject which would otherwise be barren, but which thus presents the most fascinating spectacle of exquisite order in the design, and of transcendent skill in the execution of this vast and elaborate system.

A general sketch was then given of the object of the several functions composing the animal economy, as they exist in their more perfect forms, so as to present, as it were, a map of the country about to be explored in this course of lectures. With a view of obtaining the most complete insight into the plans of Nature, the best mode appears to be, that of inquiring in what manner we could have proceeded, had we been gifted with the power of combining the materials of the animal body, and of constructing such organs as might appear to us necessary for the purposes of life. Pursuing this idea, Dr. Roget first inquired into the qualities and instruments requisite in the animal system, for the attainment of the functions of perception and of voluntary motion. The offices of the brain and nerves, the structure and modified sensibility of its different parts, adapting them to receive impressions from external bodies, and to convey each respective impression without confusion to the brain, or central organ of sensation, were reviewed in succession. The several functions of the external senses, the mechanism of their respective organs, adapted with philosophical precision to the physical properties of the agents by which they are designed to be affected, were next explained. Attention was then directed to the faculty of voluntary motion, without the possession of which, the powers of perceiving external objects, and the capacities of enjoyment and of suffering, would have been of little avail, or would have even been pernicious, rather than useful endowments. For the performance of this function, a new set of nerves is required, distinct from those which are subservient to sensation: the contractile property of the muscular fibre supplies the moving power, and the firm and rigid structures composing the skeleton, constitutes the solid frame-work of the fabric, by which the muscular force can be advantageously directed and applied, in effecting the movements of the machine. Various mechanical expedients were adverted to for the purposes of facilitating motion, for economising power, and for specific accommodation to mechanical circumstances of conformation: all these objects are classed together under the title of MECHANICAL FUNCTIONS.

A similar review was taken of the nature and objects of all those functions which are ultimately subservient to nutrition, and which Dr. Roget denominates the chemical functions, from the chemical nature of the changes which are effected by them, in the alimentary substances received into the body. The several stages which constitute the processes of its assimilation to the substance of the body were specified, such as digestion, chylification, lacteal absorption, sanguification, circulation, respiration, and secretion. The structure of the several organs by which they are accomplished was pointed out, and illustrated by drawings on a large scale. Lastly, the extensive provisions which Nature has made for the continuance of each species of animals were noticed, and the varieties of modes were enumerated, by which this important object is accomplished, in the different classes of the animal kingdom.

The order in which these various subjects are to be treated of, in Dr. Roget's course of lectures, will, as he announced, be somewhat different from that in which they have been now enumerated. He purposes beginning with the consideration of the mechanical functions, as being the simplest in their nature; and proceeding in the next place to the chemical functions, which relate to nutrition. An acquaintance with these functions will be the best preparation for the study of the class of sensitive functions, which, though highly interesting and important, are more obscure and complex than either of the preceding. The history of the functions of reproduction and of evolution will then succeed; and the course will be terminated by a general review of the combinations of structures and of functions, which characterise the different classes and orders of the animal kingdom.

Physiology is obviously a most important and essential branch of medical study. An accurate knowledge of diseased functions necessarily implies a previous acquaintance with the same functions in their healthy state. Anatomy and physiology are the foundations of the healing art; and it were much to be wished that the latter of these subjects in particular should be regularly studied as an object of diligent attention in medical education, and as a distinct department of science. Dr. Roget dwelt upon the advantages resulting to the healing art, from the extension of our views to the physiology of the whole animal kingdom. The knowledge which would be acquired by the functions and structure of the human body would be very imperfect, unless recourse were had to a comparative investigation of those of the lower animals. All the important discoveries of modern times, with regard to the human economy, such as that of the circulation of the blood, have been derived from observations made on animals. Comparative physiology, therefore, claims our attention, not merely as an ornamental branch of speculative knowledge, but as a subject of real practical interest, in which we are all deeply concerned. It opens to the philosophical inquirer the sublimest views of the immeasurable extent and stupendous magnitude of the plans of creation, and reveals degrees of intelligence, of power, and of beneficence, which far exceed the limited sphere of our conceptions.

FOREIGN DEPARTMENT.

ANATOMY.

Want of the Semicircular Canals.

In a work* published last year at Copenhagen, there is a remarkable case narrated of total want of the semicircular canals. A deaf and dumb boy, eleven years old, who had for a long time past laboured under scrofulous ophthalmia, was seized with an affection of the lungs, from the effects of which he soon expired. On opening the body, the lungs were found in a state of suppuration; the brain was healthy, as was also the portio mollis (nervus acousticus). The temporal bones were carefully removed, and submitted to an accurate examination. One was quite sound, and in the other, the bones of the ear were found in their natural state, excepting the stapes, which was cut through on dividing the bones; the tympanum, vestibule and cochlea, were quite sound; but no trace of the semicircular canals were to be discovered; the space usually occupied by them was filled with a cellular or parenchymatous substance, the cells of which were smaller than those of the mastoid process, and had no connexion with each other. The entrances to the canals were to be seen, but they all ended in blind sacs. From the statement of the mother, it appeared that the deceased child could hear very well till the second year, but at this period it was attacked with a violent fever, and became quite deaf. From the healthy state of the surrounding bones, this want of the canals could not be viewed as the consequence of suppuration, or of caries. But although the absence of the canals must be regarded as hereditary, still the account of the mother that the child could hear at one period of its existence, admits of being explained. Experience shows, that an important defect in the hearing, even if it does not produce complete deafness, is still capable of causing deafness and dumbness. Children may thus be prevented from comprehending articulated sounds, and giving utterance to them, but still hear very well every sound and noise; and thus it is very difficult to determine up to the second year, whether

* De causis Cophoseos surdo-mutorum indagatu difficilibus. Commentatio brevis, quam pro stipendio Collegii Medicæi exaratam defendere studebit. F. C. Murer. Hafniæ, 1825, cum tabulo lithograph. pp. 26.

the hearing in children be perfect. Although several instances are on record of the semi-circular canals being wanting, still, according to the author, it is the only case where the absence of these canals has been found without disorganization of any other part of the ear.

PHYSIOLOGY.

Experiments on Pulmonary Exhalation. By M. Breschet and Mr. Milne Edwards.*

The experiments of Nysten and Majendie, are well known to have proved that certain liquid and gaseous substances introduced into the blood, are speedily expelled by exhalation through the lungs. It is for the purpose of explaining this fact, that the present experiments have been made.

Thinking that exhalation differed in no manner from absorption, but by acting in a reversed way, we imagined that the exhalation ought to be accelerated by every force which attracted the fluids from within outwards, as well as that absorption would be facilitated by that which pushes the fluids from without inwards. We supposed that inspiration was the principal agent, and that it ought to bring the fluids of the body mechanically to the surface of the mucous membrane of the lungs, while it caused the air to enter into these organs. To put this opinion to the test, we adapted a tube to the wind-pipe of a living dog, which communicated with a bellows, and afterwards opened p etty extensively the thorax of the animal. The natural breathing was immediately suspended; but by artificial inflation, we produced a constant pressure on the pulmonary cells, without the alternate movements of inspiration and expiration. Six grains of alcoholized camphor were now introduced into the peritoneum of this animal, while the same quantity was introduced into the peritoneum of another, the respiration of which was natural. In the latter animal, the pulmonary perspiration, mixed with the substance introduced, appeared from three to six minutes after its application, while in the former animal it did not appear at all. Part of the muscles of the abdomen being laid bare, and a cupping-glass applied, the camphorated alcoholic smell was soon sensible from the uncovered surface. Thus, from the time that the pulmonary surface had ceased to be acted upon by the force of the inspiration, the exhalation from the lungs ceased to emit the substances contained in the blood. On the contrary, the cutaneous exhalation emitted along with it those substances, as soon as the part was submitted to the sucking power of the cupping-glass.

A certain quantity of the essential oil of turpentine was injected into the crural veins of two dogs, one of which was allowed to breath naturally, whilst the lungs of the other were in a state of compression. In the first animal, the pulmonary exhalation speedily smelled of the essential oil, and on opening the body, the lungs and pleura seemed more impregnated than the other tissues. In the second animal, this oil did not appear to be in greater quantity in the lungs than in the other tissues, such as the pleura and peritoneum. It appeared as if all the tissues had been equally impregnated. Thus, in the first case, the sucking action of inspiration appeared to have drawn into the pulmonary perspiration all the turpentine, and to have attracted it from the other tissues. On the contrary, in the second, the pulmonary surface, deprived of all sucking power, had not been penetrated by the turpentine more than any of the other tissues, and just in the same proportion.

A solution of phosphorus in oil of turpentine, was injected into the crural vein of a dog, in which artificial respiration was kept up. The result was, that the phosphorus speedily became evident in the pulmonary exhalation, but was not perceived in a cupping-glass applied to the external surface of the stomach. This contradiction is explained, by supposing with Magendie, that the fat oil could not pass the capillaries of the pulmonary artery, and consequently could not reach the breast and arterial system; and that, stopped in the capillary vessels of the lungs, the contractions of the right ventricule caused it at last to drop through the cells of the lungs. Finally, we remarked, that all the parts of the skin did not answer with the same facility to a cupping glass. The skin of the thigh, for example, less easily than the skin over the stomach. The conclusions which have been made from these experiments are, that the suction which accompanies every movement of breathing, is the cause which expels the liquid and gaseous substances accidentally mixed with the blood, more particularly by the pulmonary exhalation, than by the other exhalant surfaces of the body.

Remarks on the Human Voice. By Dr. Liskovius of Leipsic.*

Professor Rudolphi in his elements of physiology, (Grundriss, der Physiologie, Berlin, 1821—23—26,) has maintained

* Archives Generales, August 1826.

* Meckel's Archiv fur die Physiologie, April, 1826.

some points about the human voice, which on deliberate consideration, cannot be deemed quite correct. In the second volume of the work alluded to,* it is stated: "Liskovius, whose treatise† throws much light on this subject, is evidently incorrect, in the plate he has given, in which he attempts to prove that the vocal ligaments are elongated during the dilatation of the rima glottidis. The following will be quite sufficient to show that in common inspiration and expiration, the rima glottidis remains so wide open, that no sound can be uttered, and therefore in deep sounds it cannot become wider. The plate is for this reason incorrect, as it represents the rima glottidis more widely opened than can possibly be the case in the human voice; moreover, he has given the ligaments obliquely extended from each other, which ought not to have been the case. The deepest bass sounds cannot be conceived but in a slight widening of the rima glottidis, as in breathing, from the twelfth to the tenth of an inch. In high sounds, the rima glottidis always becomes narrower, but the vocal ligaments are elongated from the arytenoid cartilages being drawn backwards. Musicians for a long time distinguish the full, or chest voice, from the other, or falsetto; Haller and Kempelen also mention the latter as an imperfect voice. Liskovius first observed it accurately, and he has perhaps the merit of having accurately described the state of the rima glottidis in the falsetto sounds. He observed, for instance, that in these, the posterior portion of the rima glottidis is closed, and that only a small part anteriorly is opened; this appears very probable. In other respects, Liskovius is wrong; he believes that the false to voice is quite a proper sound, and that the higher notes all belong to it; but this is quite false. Catalani and Zelter, for instance, go much higher than any falsetto voice, however obscure, but their higher sounds are given in a full sounding pectoral voice. The singer who possesses not this power, passes into the higher tones by an abrupt movement or leap, as Zelter expresses himself, whom I have questioned on this subject, on which no one is more competent to judge. When bass singers wish to sound sharp notes, they allways sing with the falsetto voice; we must, therefore, consider this at present just as it was thought by the ancient musicians, a defective kind of voice."

In opposition to this, I have to observe, the rising and falling of the larynx and the increase and diminution of the rima glottidis are produced by the antagonising of muscular power. By the antagonising of muscular power, I understand the reciprocal relation between two muscles or divisions of muscles, which, in consequence of their opposite situation, exert themselves against each other.

When two muscles antagonise, there is always a point of rest between the spheres of their action. This point of rest is the point where the opposite powers are equal to each other; therefore, when these powers are equal exactly in the middle, between their external directions; when these powers are not equivalent at a distance from the middle, in proportion as the opposite side is the stronger; except at this point there is no rest or repose, and so much less approaching to rest is any part, the further it is from this joint.

Ex. gr. the fore-arm and the leg, describe each of them from the greatest extension to the greatest flexion, an angle of about 140 degrees. Their point of rest is about 70. The further, above or below this point, the greater the exertion, the less the power of persevering in the same position.

So also, with the larynx, and particularly with the rima glottidis. In perfect rest, the larynx is in the medium between its lowest and highest condition, and the rima glottidis in the medium between its greatest dilatation and contraction. In this state have I found the rima glottidis in the freshest larynxes. And as to the condition of the larynx, any one may convince himself of the correctness of what I have said. The more the larynx sinks, the wider becomes the rima glottidis, and the more the former rises, the narrower becomes the latter. Both proceed in conjunction, and equally.

In tranquil inspiration, the larynx gradually sinks somewhat, and the rima glottidis dilates somewhat, though not to the extremest degree. For if, in this state, any one utter a tone, it is only about a third or a fourth below the middle of the compass of his voice; and because, accordingly, these tones are most easily uttered, they are commonly used in speaking, although speech also avails itself of the higher and lower tones. He, for example, who has a compass of voice, from *e* to *f*, will, in the manner I have described, utter about *d* or *e*, and will commonly speak in these tones; but, if his compass of voice is from *b* to b, he will utter in the above mentioned manner, and commonly speak about *g* or *f*, and so according to the compass of his voice. These middle tones, in speech, are what, in the ancient Greek metrists and grammarians, is called ὁ ὁμαλισμὸς τῆς φωνῆς, the level of the voice. Dionysii Thracis Grammatica, in Imman. Bekkeri Anecd. Græc. vol. II. p.

* Page 377—78.

† Liskovius dissertatio sistens theoriam vocis. Lips: 1814.

629; Porphyrius Scholia, on Dionysius Thrax, in Villoison's Anecd. Græc. tom. II. p. 103; Melampus, Scholia on Dionysius Thrax, *ibid.* p. 180; Moschopuli Opuscula Grammatica, e. cod. nuper. in Bohemia reperto nunc primum, ed. fr. n. titze. p. 40.

If the rima glottidis, in tranquil inspiration, were in its greatest dilatation, the deepest sinking of the larynx, and the most violent extension of its muscles would be then observable. Every one would, therefore, speak generally in his lowest tones, because they would most readily present themselves.

In *deep inspiration*, the sinking of the larynx, and the dilatation of the rima glottidis is greater, but yet not at the greatest.

In quiet expiration, the rima glottidis extends to its medium dilatation, and the whole larynx from its medium condition gradually back, as every one can see or feel in himself. The condition of the larynx is, therefore, by no means one and the same in inspiration and expiration.

How then does it happen, that common breathing produces no tone, nor that the dilatation of the rima glottidis is so great, that on that account no tone can arise, but from the inferior strength of the impulsion of the air. The best comparison with the human voice, is the whistling of the lips, better even than the sounding of the pipes of an organ. As the narrowest opening of the lips does not produce a sound by a gentle impulsion of air, but only by a more violent one, so does the rima glottidis. The whole larynx may be extremely contracted, and yet the breathing inaudible.

This circumstance Professor Rudolphi has altogether overlooked; therein lies his error. Thence he was not able to explain silent breathing, any otherwise than by the improper assumption of a rima glottidis, dilated beyond the compass of the vocal power.

As to the origin of the falsetto, Professor Rudolphi has misunderstood me, and attributed an opinion to me, which, honourable as I esteem the praise he gives me, cannot appropriate to myself. Whether I am to blame for the misconception, I cannot decide. My words are:—

Ninth Experiment.—" Duplicem effeci sonorum speciem, in quibus pectoralis vox atque collaris erat facile distinguenda. Si nempe glottis imminuebatur ligamentis tantummodo contrahendis, non intendendis, vox erat pectoralis. Quo magis illa erant contracta, eo acutior sonus. Infimi quidem sonorum fiebant glottide per omnem ipsius longitudinem aperta. In ascendenda vero sonorum scala posticae ligamentorum partes magis quam anticae sibi appropinquarunt, quid, quod tandem prorsus confluxere, ita, ut superiores sonorum pectoralium ab anteriori tantummodo glottidis parte efferrentur, posteriori penitus conclusa. Ita glottide quam maxime compressa sonus pectoralium omnium supremus existebat."

Tenth Experiment.—" Sin autem antica ista glottidis pars magis imminuebatur ligamentis non solum contrahendis, sed etiam extendendis, in rimulam conversa haec est perquam angustam et longiusculam, unde soni quidem prodiere tenuiores atque teneriores, nimirum vox haec erat collaris. Quo magis vero glottis ita imminuebatur, eo acutior sonus, usque dum omnis tandem glottis esset conclusa." (Dis. Hist. Theor. voc. p. 24.)

And page 30, 31.—" Quantum ex istis experimentis videre licet, omne vocis utriusque discrimen consistit in eo, quod pectoralis vox laxis efficitur ligamentis, collaris autem intentis, ita, ut pectoralium sonorum modulatio fiat ligamentis tantummodo vel contrahendis vel dimovendis, collarium autem, non solum ita tractandis, sed etiam simul magis minusve intendendis. Et quidem infimi sonorum pectoralium a tota glottide efferuntur. Quo magis autem sonorum scalam adscenderis, eo propius posticae ligamentorum partes conveniunt, usque dum tandem prorsus conjungantur, ita, ut sonorum pectoralium superiores ab anteriore solummodo glottidis parte proferantur, posteriore omnino conclusa. Hanc enim falcata illa, quam supra jam laudavi, ligamentorum glottidis figura in se habet utilitatem, ut glottidis a[illegible]dinem magis imminuere, eoque sonos efficere possis acutiores, quam si ligamenta essent rectissima. Itaque ligamentis quam maxime contractis summus efficitur sonorum pectoralium omnium. Sed non extremus hic est glottidis imminuendae terminus, immo ulterius eam extenuare licet, ligamentis non solum contrahendis, sed etiam magis magisque extendendis; eo enim antica illa istius pars longior quidem fit, et vero etiam augustior, unde soni quidam oriuntur acutiores atque teneriores, qui fistulares nuncupantur sive collares. Qui quidem sunt eo acutiores, quo magis ligamenta contrahuntur simul atque intenduntur. Sunt vero soni quidam intermedii, qui et pectorali voce et collari possunt proferri, quia nimirum eo glottidis amplitudo, qua illi existunt, utroque modo fieri potest."

The falsetto voice is produced, not by the anterior part of the rima glottidis alone, but by the simultaneous approximation and tension of the vocal ligaments; on the other hand, what is called the true, or pectoral voice, arises from an approximation of the vocal ligaments, without any tension of them. If the vocal ligaments are approximated in whatever degree, so long as the anterior waving part of the rima remains open, a true or pectoral tone is still produced, till the vocal ligaments at the same time,

by the bending back of the arytenoid cartilages, are drawn tense. Then the falsetto voice first originates. This I have continually found in numerous experiments on different larynxes, and in presence of several musical teachers.

That I have called the falsetto voice a distinct species of voice, in respect of its mechanism, its tone, and its compass, I must justify before musicians and physiologists. "That the higher tones always belong to it," is certainly false, but it is also false that I have made such an assertion. My expression is (p. 35), "Sunt vero sui cuique fines inter utramque vocem a natura terminati quos excedere non licet, nisi longâ et assiduâ exercitatione. *Quid, quod collaris vox nonnullis hominibus fere omnis deest.*

However small the height of the full tones, if a base singer, for instance, can only sound *f* or *e* with a full voice, his voice is certainly defective; but the defect is in the want of the proper pectoral tones, not in the presence of the falsetto, for without it such a singer would be still more helpless. How can the presence of so general a gift of nature be considered a defect? At any rate, the falsetto voice is not altogether to be dispensed with, at least in tenor; only the singer must make a gradual and skilful transition, a leap or abruptness is only perceivable in unfavoured or untutored voices. This Zelter himself will agree with.

SURGERY.

M. Lisfranc presented to the surgical section of the Royal Academy of Medicine a woman, the neck of whose uterus had been cut off four months previously for a cancerous affection of that organ. A commission was appointed to examine the woman, who reported that they found the neck of the womb a little shorter, but no symptoms of a return of the disease.

BIOGRAPHY.

Biographical Notice of the late Professor LAENNEC.

Theophilus Rémé Hyacinthe Laennec, was born at Quimper, in Basse Bretagne, in the year 1781. His earlier years were spent at Nantes with his uncle, who it is supposed infused into his nephew that desire for medical knowledge, the cultivation of which gave the latter such a high reputation.

Young Laennec came to Paris in 1799; having been previously well instructed in the Greek and Latin languages. He there followed closely the clinic of Corvisart; it was there where he first commenced his anatomico-pathological researches, and acquired that knowledge of disease which he afterwards so successfully cultivated.

In the year 1802, two great prizes in medicine and surgery were awarded to him by the Institute, and in 1803, he graduated. His Thesis was intitled on the Doctrine of Hippocrates, as applied to practical medicine. There, as in every other occasion, he held up the father of medicine in that light which has caused him to be so much and so justly venerated by every lover of science.

At this period, pathological anatomy was not cultivated with that zeal which it is at the present day. The numerous detached pathological observations on the different parts of the body, suggested to Laennec the idea of bringing them together, in order to deduce certain general conclusions, and establish from them certain fixed principles. Dupuytren formed about the same time the same idea. And as the mode proposed by the one, was exactly the same as that laid down by the other, a dispute arose between these two illustrious pathologists, to whom the glory, as it is called, of arrangement should belong. The dispute was terminated by both of them giving lectures on pathological anatomy. This is the period at which the French themselves say that morbid anatomy became ranked by them amongst the medical sciences. It was at this time that Laennec studied and wrote most; for besides the great part of his time which was spent in reading the ancient medical classics, he contributed to the Bibliotheque Medicale, in fact he was the Editor of it for many years. It was at this time also, that he wrote several of the best papers on medicine, and morbid anatomy, which appeared in the first 23 volumes of the *Dictionnaire des Sciences Medicales.*

He was nominated to the Hôpital Necker in 1816, and it was now that he first entertained

the idea of *mediate auscultation*, and that he applied it to the diagnosis of disease. In 1819, the first edition of his work appeared, entitled "Sur l'Auscultation Mediate;" but from the great exertions which the author required to make, his health became so seriously affected that he was obliged to go to the country for the purpose of recruiting his strength. He remained there for two years. At this time the stethoscope became the subject of considerable discussion, and even of ridicule.

In 1821, on returning to Paris, he was nominated by Hallé as physician to the Duchess of Berry, mother to the heir presumptive to the crown of France, and immediately afterwards succeeded his patron in the same situation that Corvisart had filled. During the period that he gave lectures at the College of France, he endeavoured to detail to a numerous audience, composed both of practitioners and students, the peculiar characters of the morbid states of the tissues. It was at this time that the students became insubordinate from the interference of the priesthood with the school, which ultimately led to the dissolution of the Faculté de Medicine. The lectures were of course suspended.

Although nominated as one of the commission for re-modelling the school, he was not appointed a professor. This was on account of a wish of the ministry to place him amongst the Royal Council of public instruction, a situation of higher distinction. During the time that he was a member of Commission, however, he used all his influence to have several of the liberal professors re-elected, and to ameliorate the condition of those who had been for ever struck off the list. Laennnec was an inveterate enemy of the author of the new French Doctrine (Broussais.) The polemical papers which were written by these two distinguished men, were read with great avidity by the partisans and enemies of the *gastro-enterite* doctrine.

The large doses of medicine employed by Rasori, and the followers of the modern Italian school, induced Laennec to make trial of those remedies, which, even in smaller quantities, have been looked upon as highly dangerous. The result which he obtained from this treatment was very remarkable, and such as to leave the question of the contra-stimulant practice still undecided.

After the first edition of the *Traité de l' Auscultation Mediate* was nearly sold, Laennec commenced a second edition, which is, in fact, so much improved, that it more deserves the name of a new work, than a new edition. This work, as many of our readers may know, was fortunately finished a short time previous to the commencement of Laennec's illness.

Laennec had long suffered from a slight pain in his right side, and diarrhœa. About the latter end of April, he was attacked with dyspnœa, accompanied with some slight fever, and left Paris for Kerlouarnec in Finisterre. He arrived there quite exhausted. His diarrhœa increased, and put a termination to his existence on the 13th of August, 1826, at the age of 45.

Most of our countrymen, who have visited Paris for the purposes of medical instruction, can bear witness to the affability of Laennec. He was very attentive to all foreigners, a custom far from being general, among the French. Laennec's religious and political opinions, were of the most orthodox kind; he was a stanch royalist, and a firm supporter of all the superstition and bigotry of the catholic church. In his political creed, he had at least the merit of consistency; for during the time of the republic, and the reign of the emperor, he remained a true royalist. What appears most surprising, however, is, that an individual with such powers of mind as Laennec possessed, could, at the same time, have been a fanatic!

THE LANCET.

London, Saturday, October 14, 1826.

Our readers have all heard of a certain Vicar, who changed his religion with the same ease that he doffed his surplice, wisely preferring his own interests to the dogmas of any particular church, and determining, whether Lutheran or Papist, to live and die the Vicar of Bray. There is no recent example of this magnanimity more obvious or diverting than the conduct of Dr. James Johnson, the Medico-chirurgical Reviewer, who now preaches doctrines which he formerly denounced as damnable heresies, and in a place especially set apart to the purpose. Will it be credited, that the man who, barely three years ago, called hospital reports "unsavoury suits," and thanked God that his olfactories were unapt at "smelling them out," now exults in the glory of his nostrils, and opens a periscope to receive all the vile odours and filth which the Hole and Corner Scavengers can stir up and collect! Not content with this, he swears there is nothing of such exquisite fragrance:—

"Whatever scepticism may attach to statements made in private practice by individuals," says the Doctor, "the records of hospitals are perfectly free from suspicion of infidelity. Any attempt at adulterating, or even colouring cases of this kind, would argue little else than insanity in the superior medical officer; while from those who are employed to copy or abstract the histories, all temptation of misrepresentation is not only taken away, but a positive danger would be incurred by such an attempt; the reporter being known, and of course responsible for errors and inaccuracies, much more for perversion of facts."

Again:—

"It has been most untruly asserted, that we are inconsistent in our conduct, having, it is alleged, at one time, condemned the publication of hospital reports. We deny it. We condemned, and do still condemn, garbled and erroneous reports, as injurious and unjust; but we have ever recommended, in the most strenuous terms, the publication of authenticated, correct, and FAIR reports of cases occurring in public hospitals."—*Johnson*, Oct. 1826.

Lastly, what he considers *fair* reports may be gathered from the following paragraph, which appeared in the *Review* for 1824:—

"No man can command success in surgical operations; and *if a surgeon fail from want of dexterity*, he suffers mortification enough, Heaven knows, in the operation room, without being put to the *cruel and demoniacal torture of seeing the failure blazoned forth to the public*."

So much for Dr. James Johnson's consistency! *Fair* reports, then, are those which do not put the surgeon to the "cruel and demoniacal torture of having his want of dexterity blazoned forth to the public!" Un*fair* and "erroneous reports" are those which tell the humiliating language of truth! "We have ever advocated the one and decryed the other," says Johnson, "and if this be inconsistency, we hope never to act otherwise!" It is not honest at any rate. The sophistry which runs through the first paragraph is so obvious, that we need say nothing about it, although we protest that we do not understand why the "records of hospitals," made by the surgeons, or some willing slaves about them, are perfectly free from that "suspicion of infidelity," which, according to this writer, attaches to the statements of private practitioners. Nor do we perceive that "the reporter being known, and, *of course*, responsible for errors or perversions of facts," will be much protection to the public, provided he keep his peace with the surgeons, which, by sometimes suppressing a case, sometimes concealing or garbling the truth, and constant servility, he may readily secure, perhaps, their "esteem" to boot, and other falsehoods, which cost nothing, and are but a *quid pro quo*, in the shape of testimonials. He may publish "*fair* reports," and get thanked for

his pains, but if he dare blazon forth any "want of dexterity," put the surgeons to "demoniacal torture" by telling the truth; or fail in giving a certain inclination to the cases, so as to prejudice the public in their favour; in short, if he discard party and friendship, and be determined to do substantial justice at all times, he will be accused of a malicious design against his betters—of faction, intrigue, and falsehood; and, finally, be ejected the hospitals. We have argued upon the supposition, to use the words of Dr. Macleod, that the hospital physicians and surgeons are "absolved from all responsibility with regard to the accuracy of the details," and that reporters capable of taking cases are known and willing to bear the heavy responsibility which is inseparable from the duty—but where are they? Nowhere to be found; and if the responsibility rests any where, it is either with Dr. Macleod himself, or with the hospital gentry, whom he has publicly absolved from all pretensions to accuracy. How, then, are Dr. Macleod's cases authenticated beyond our own, granting him, for the sake of argument, the *merit* of equal accuracy? We have published statements, reflecting in severe terms on some of our hospital surgeons, which, if false, might easily have been disproved, either before a legal tribunal, or at the bar of public opinion. Have they dared to confront us with either? Any attempt at "adulterating or colouring cases of this kind," to use the pharmaceutical slang of Dr. James Johnson, "would argue little else than insanity" on our part, who have no object in view, save the public benefit and the improvement of the profession; but the matter is widely different with those who have self-interest to gratify and indulge, and every reason to fear a public exposure, even of statements made by *themselves*, without being "absolved from all responsibility with regard to their inaccuracy!" Dr. Macleod throws his protection around them:—

> Me, me (adsum qui feci,) in me convertite ferrum,
> Conclamat; mea fraus omnis; nihil iste nec ausus,
> Nec potuit:

and if any thing savour of "insanity," must take it all to himself, ere he can drag the unwilling drones from the holes and corners in which they have so long delighted to burrow and nestle themselves. One word more, and we have done: Dr. James Johnson speaks of recording "the more important cases occurring in hospitals in a book open to the inspection of all the students," and would have us believe that the cases in the yellow journal are of this description; that every stage of the treatment has been open to the critical eye of the student; but on looking through the last number, we perceive cases which happened in 1817-14-15-12, and one not longer ago than 1805, raked from their musty repositories to do homage to the wonder-working genius of Mr. Benjamin Brodie! and help to bolster up the reputation of Dr. Johnson's "respected cotemporary."

> Why from the bleeding womb of monstrous night,
> Burst forth such myriads of abortive stars?

is a question which we shall endeavour to set at rest in our next Number, not having room in the present for so vast and important a subject.

Two or three cases treated by Messrs. Bell and Shaw, are useful illustrations, after the manner of *Pott*, of the importance of relaxing the muscles of fractured limbs, more especially when the upper portion of the femur is the seat of the accident.

"The rule of relaxing the muscles of a limb by position," says the writer, "may be considered of the greatest value in the treatment of fractures of the shaft of the femur; for it is acknowledged, that the shortening and deformity which are but too often the results of this accident, are produced by the numerous and powerful muscles which move this bone.

The obvious principle, therefore, to be

attended to in the treatment of the fractured thigh-bone, is to place the injured limb in that position which most effectually relaxes these muscles; and the double inclined plane appears to answer this intention better than any other form of apparatus as yet proposed. The distortion consequent on fracture of the femur, depends upon the upper portion of the fractured bone being displaced by the action of the strong muscles which are inserted into it. This displacement occurs in a direction upwards and outwards, the gluteal muscles dragging it in the latter direction, whilst the psoas and iliac elevate and rotate it outwards. It will also be perceived, that these muscles must act with greater force and advantage, when the fracture is high in the shaft of the femur; and, consequently, that the projection outwards, and the elevation will be increased, in proportion as the bone may be broken high up, and near the brochanters."

When the femur is fractured near the trochanter, a plane, fitted for one extremity only, is employed. "By this contrivance," says the writer, "we have it in our power to give the limb whatever direction, with relation to the trunk, we may think proper."

"This position consists in the inclination of the thigh and leg outwards, so that they may form an obtuse angle with the trunk of the body. By these means all the muscles will be relaxed; the lower portion of the fractured bone will be brought into a line with the upper; the broken extremities will be retained in due apposition, there will be no further tendency to displacement, and thus shortening of the limb will be prevented."

It should seem that Mr. BELL has not yet succeeded in banishing Desault's splints from the surgery of the Middlesex Hospital. JOE BURNS, we warrant him, is inexorable. So was CARTWRIGHT; and we are free to confess, that we have seen better limbs turned out of that hospital, under the auspices of the long splint, than by the apparatus here proposed; which, though well adapted to many cases, is far from being generally applicable. The best judge in London, of the relative value of the two plans of treatment, is the sensible nurse of Percy's ward —we forget her name,—Bayliss, we rather think.

We pass over Mr. TRAVERS's "case of wound of the carotid artery," because it has been fully reported in this Journal, Vol. X. p. 572. Some foolish person, to be sure, has added a few remarks on wounds of arteries, but these are quite unworthy of comment. He talks of "saltatory jets" of the blood flowing "per saltem," &c. &c.

Mr. HERBERT MAYO has made some experiments, with a view of ascertaining the effect of tying the ductus communis choledochus, in order to settle a question which seemed to have been decided some years since by Mr. BRODIE, (who tied the duct in young cats, and found that chylification was arrested, until Nature had repaired the mischief,) but which has lately been agitated by MAGENDIE, who, in the last edition of his Physiology, has the following note:—

"I have repeated the experiments of tying the ductus communis choledochus in adult animals; the greater number died of the consequences of the wound of the abdomen, and the violence attending the ligature of the duct. But in two cases, in which the animals survived several days, I was enabled to satisfy myself, that while chyle had been formed, and fæcal matter produced, the fæces had not the usual colour; which is not surprising, as they contained no bile. The animals had not become jaundiced."

Mr. MAYO's experiments tend to confirm the deductions of BRODIE, and lead him to "*suppose* that M. MAGENDIE may *possibly* have overlooked some source of error in his experiments, or that the duct had been restored in the two instances which he mentioned, and that the bile had thus again found its way into the duodenum;" but Mr. MAYO does not perceive that the French physiologist found *no bile in the fæces*, which is sufficient proof that the duct was tied, and that it had not been restored. When Mr. MAYO makes his next attempt "to reconcile conflicting accounts," he will, perhaps, be less venturesome with his "supposes."

In our last Number we noticed the resignation by Mr. LAWRENCE of the situation of surgeon to the London Ophthalmic Infirmary, and cautioned the Governors against approving of any recommendation from the present Committee, in favour of either of the candidates for that office. If the Governors of this, and other public charities, were aware of the manner in which such Institutions are usually "got up," and of the chicanery and intrigue on the part of the individuals who usually secure to themselves the management of them, they would, we conceive, exercise a greater degree of deliberation than they usually practise, before they place *certain persons* in offices of responsibility. We believe that the greatest portion of subscribers to public charities, are generally actuated by the best possible motives, and that they give their money with the unalloyed intention of mitigating the miseries of their suffering fellow-creatures. They ought, however, to recollect, that the simple act of signing a check for ten or twenty pounds, is not, in itself, sufficient for the attainment of so desirable an object; on the contrary, it often happens, that money thus bestowed, is employed for no other purpose than of supporting either unprincipled quacks, or some other intriguing scoundrels, who are continually ejaculating "charity, charity," with no other view than to their own individual advantage. The supporters of public charities, therefore, should see, that their *intention*, as far as is possible, is fulfilled. They ought to know that their money is properly expended, and should exercise a greater degree of prudence in the selection of those persons who usually constitute *Committees*. As these bodies have the entire government of the Institutions under their control, they not unfrequently act in direct violation of every principle of justice and of propriety; not only neutralise the benevolent efforts of the subscribers, but abuse the trust reposed in them, by filling the offices of the Institution with some of their immediate relatives or dependents, who are altogether incompetent to the adequate execution of the duties which are attached to them. Governors should also bear in mind, that those individuals who are usually the most desirous of being placed upon Committees, are the least deserving of their confidence; such persons have, it is true, *charity* as they call it in view, but it is directed to themselves only.

Through the apathy of the great body of subscribers to public charities, it frequently happens that three or four active, bustling, intriguing fellows, contrive to get the conduct of each of these institutions into their own hands; and when in office, these worthies, with a view to display their consequence, construct by-laws of the most preposterous description. These reflections have been induced from a consideration of the circumstances which led to the establishment (amongst others) of the London Ophthalmic Infirmary, and of the recent occurrences which have transpired at that Institution. We believe the charity has lost the valuable services of Mr. LAWRENCE, in consequence of the disgust that Gentleman entertains towards those individuals who hold the reins of its government. The conduct of these persons is most extraordinary; in fact, to us it is altogether inexplicable. If they had been desirous that the public should derive extensive benefits from this establishment, they certainly would have exercised every effort to secure to the patients of the Charity, the scientific labours of a gentleman of Mr. LAWRENCE'S attainments; but from the stupid, annoying, and narrow-minded system which they have thought proper to adopt, we understand he has retired in disgust, at which no one will feel surprise, when we state that the Committee, only two or three weeks since, enacted a by-law to the effect that "*no pupil should be allowed in future to take notes of cases;*" a

regulation so unjust towards those who have paid to see the practice of the Infirmary, so opposed to liberality, and so calculated to prevent the proceedings of the Institution from adding to our stock of scientific knowledge, that it was impossible for a man of Mr. Lawrence's liberal character to continue any intercourse with such degraded beings. No one can feel surprise at his having left the Institution. There are candidates out of number for the office which he has left, but from another "enlightened" by-law, we fear that those persons who are the best capable to succeed him are disqualified; it having been enacted by some of the boobies composing either the present or a former Committee, that no person can be an eligible candidate unless he has been an apprentice to some Hospital or Infirmary, or a Demonstrator of Anatomy. The public, it is reported, are indebted for this enactment to Mr. Travers. This constitutes a part of the *system*; it is a law, in fact, to secure the office to the apprentices of the London hospital surgeons, and as these gentlemen frame laws, and use all their influence to obtain for their apprentices, situations that lead to reputation and emolument, they render even the apprenticeship itself a matter of some importance; and thus we find them demand and receive premiums of one thousand guineas each for these situations, a sum which a merchant does not hesitate to pay with his boy, when he sees that the child, no matter what his capacity or incapacity, is sure, through the working of the *system*, of being thrust into some office which leads to reputation, if it be possible for him to acquire it, and to emolument, whether he deserve it or not. We entreat the Governors to reflect on these matters, and to make every possible inquiry into the attainments of the respective candidates, before they hazard a vote. Let each put this question to himself, "Am I about to give my vote to a man whom I would employ, if afflicted with disease of the eyes?" Hospital apprentices will doubtless come forward on this occasion, with the most flattering testimonials from their masters and other hospital surgeons; but let the Governors heed them not, as they form part of a system, which is far more characteristic of avarice than of regard either to truth or justice. Let the candidates be asked what experience they have had in ophthalmic surgery; not what they have seen, but what they have *done*. If the Governors will but act with spirit and judgment at this juncture, they will rescue the Institution from the thraldom of an ignorant junta; will do justice to their own characters, and confer a valuable boon on the medical profession. The Governors should instantly annul the regulation which restricts the eligible candidates to those who have been Hospital apprentices, in which case they will be enabled to select their surgeon from a more extensive field of competent practitioners, and the Charity be thus made available to the purposes of surgical science. The order which interdicts the taking of notes of cases by pupils, should instantly be erased from the books; it is an act of gross injustice towards these gentlemen.

When we spoke of this Institution on a former occasion, our observations gave rise to some angry remarks from a part of the Committee; we were of course very much abused for having spoken the truth, and were threatened with "Law." One was determined to maintain his dignity—a second to vindicate his honour—and a third to prove that the Institution was founded in the purest philanthropy, and that the most charitable feelings had influenced the conduct of those who had been officially connected with it. This is all very agreeable, we dare say, to the utterers, and we doubt not they are mightily in favour with themselves; at all events, if self-satisfaction be in the ratio of the success of a scheme, friend Battley is one of the happiest creatures in

the world, and it is impossible that we can lessen his enjoyment by indulging the Governors with a sight of his first efforts relative to the establishment of the London Ophthalmic Infirmary, in which they will not fail to discover an extraordinary desire for the welfare of the poor, patriotism of the most exalted description, and an inordinate anxiety for the advancement of surgical science.

This Infirmary was founded in 1805, for the "Benefit of the Public;"—so says the prospectus published in that year, to which is attached the name of RICHARD BATTLEY, Sec. —for the *public*, so states the printed prospectus. But what says friend BATTLEY to an acquaintance, on the back of the same prospectus? Here the secret comes out, with a vengeance—here we draw aside the curtain, and the objects presented to our view enable us to form a correct estimate of the *patriotic* feelings which gave rise to the establishment of this Infirmary! Of the late Surgeon to this Institution, Mr. SAUNDERS, and the manner in which he was upheld, and annually puffed, we shall speak in our next Number, having enough only of space left to insert the notes of FRIEND BATTLEY.

"London, 17th Oct. 1804.

"MY DEAR SIR,—You will observe by the printed proposals herewith, what is going on FOR OUR FRIEND SAUNDERS. Knowing your good wishes TOWARDS HIM, and that you would be gratified at the progress made, I take the most early opportunity of acquainting you with it, and its success. A number of subscribers have already placed their names, so as to leave very little doubt as to the ultimate success of the BUSINESS. Mr. ANGERSTEIN, A CITY GREAT MAN, IS TO BE AT THE HEAD OF IT. * * * * * * * * *

"Your obedient servant,
"RICHARD BATTLEY."

So, after all, it would appear, according to Richard, the Infirmary was not for the benefit of the *public*, but FOR OUR FRIEND SAUNDERS. From another printed document now lying before us, it appears, that on January 4, 1805, in a vigorous effort towards the success of the scheme FOR OUR FRIEND SAUNDERS, a meeting was held at a City Coffee-house, when the proposal was read, certain resolutions agreed to, and a Committee chosen; in which, according to Mr. BATTLEY's prediction, we find the name of ANGERSTEIN. At this meeting Mr. TRAVERS was in the chair, and, of course, subsequently became Surgeon to the Infirmary, established—for the *public*? no, for OUR FRIEND SAUNDERS.

In another note at the back of the Resolutions, and after the meeting was held, Mr. BATTLEY says to his friend:—

"MY DEAR SIR,—By the inclosed you will observe the progress of SAUNDERS' plan. WE HAVE HAD HOT WORK OF IT---A ROYAL INFIRMARY having resulted from our plan. Look to our advertisements, 2d and 8th January, in The Times.

"Yours most truly,
"R. BATTLEY."

Whilst these letters exhibit the HOT WORK displayed in the efforts of Mr. BATTLEY's friendship for "OUR FRIEND SAUNDERS," they no less expose the TRADING which is carried on in the CHARITIES of this metropolis, and the mode in which the far greater portion of them are "got up." For the present we have done; but in our next Number we shall present the Governors with some other information on the subject of this Infirmary, and point out to them the manner in which their Institution was for some years employed in puffing a SECRET OPERATOR.

We advise our correspondent who is anxious to advertise himself by compiling a work on a subject of which he knows nothing, to employ a couple poor Germans to translate a few chapters on some diseases of the eye, from SCHMIDT, WELLER and BEER; as to the *pay* usually given, and for further particulars, we refer him to Mr. GUTHRIE.

As yet nothing has been done with regard to the disgraceful behaviour of the beadles of St. Bartholomew's Hospital. Mr. Gates still glories in his triumph over the medical men; still laughs at the attempts of Messrs. LATHAM, VINCENT, and STANLEY, to rouse the Committee from their disgraceful apathy. Now we care little about the Committee neglecting their duty, when that negligence is not detrimental to the health of the wretched and unfortunate objects of the charitable founder's bounty; but when these *delegates* or stewards of another's charity take upon themselves to support a contemptible underling in iniquitous conduct, it becomes every upright man to bring the delinquents to the bar of public opinion.

A patient died in Baldwyn's Ward about a fortnight ago, or rather more, in the extremely hot weather, between five and six o'clock in the morning, and the worshipful beadles, although sent to several times to remove the body, took no notice of the summons, but allowed it to remain in the Ward until the friends came to remove it themselves, which took place about one o'clock. The corpse of a patient who died in Darker's Ward on Wednesday week, in the evening, was allowed to remain in the Ward all that evening, not being removed until the following morning. Now, our medical readers are all aware of the disgusting effluvia arising from a patient after being operated on, and will join us in reprobating those who league together to uphold such a system. Mr. VINCENT was at the Hospital on the evening in question (Wednesday), and being told of the circumstance, went to the sister of the ward, complained of the beadles in strong terms, and said, if the body was not removed, he would certainly make a complaint to the Steward. The beadles, nevertheless, *did not remove it until morning*. The spirit shown by Mr. Vincent, on this and the former occasion, redounds much to his credit.

Is it not extraordinary the Committee do not interfere in this business? The great body of the Governors would never allow such conduct in their *employées* to pass unnoticed and unpunished. The Committee, we believe, take an oath to do their duty conscientiously; how, then, can they reconcile their conduct? It appears to us, however, that their taciturnity on the present occasion goes pretty far to convict them of being —what we shall not say. If the Committee are determined to despise such motives to action as justice and charity, not to mention the obligation of an oath, can it be possible they have screwed up their minds to such a philosophic pitch of indifference, as to be able to meet with firmness the degree of public indignation which would most certainly be heaped on them, in case they were again to generate the (what was then termed) plague of 1822 in this Hospital? In 1822 the contagious fever was very severe in its ravages in St. Bartholomew's; and all London was in agitation until the Committee issued a bulletin to quiet their fears, and inform them that it was merely typhus. We cannot conceive any plan more admirable or better fitted to generate and spread such disease, to produce a like catastrophe, and again set London in an uproar from the dread of TYPHUS FEVER!

A few days ago, Mr. LANGSTAFF produced, at St. Bartholomew's Hospital, a preparation of a femur, which he described as having been fractured at its neck within the capsule, and in which there had been subsequent bony union. The head of the bone, instead of being smooth, was rough, and slightly excavated in several points, having the appearance of ulcerated bone. The head and trochanter were closely approximated, so as to leave no intervening space which could be denominated the neck; the head and trochanter major being on the same level. There appeared a line of frac-

ture at the junction of the head with the great trochanter, and a complete plate of bone firmly uniting the two parts together. Mr. LANGSTAFF was ignorant of the state of the capsular ligament on examination! He showed the preparation to Mr. EARL, who seemed perfectly convinced of the fact. He said, that he had received, a few weeks ago, a preparation from a gentleman illustrating the same fact, and confirming him in the opinion he had formed, from the several specimens that had fallen under his notice. He (Mr. E.) had shown it to several surgeons and anatomists of eminence, who were alike satisfied that there had been bony union within the capsule. He was unable to give the particulars of the case, nor was he aware what was the STATE OF THE CAPSULAR LIGAMENT on examination. It is understood by many, that Sir ASTLEY COOPER is of opinion that such union cannot take place: but this is not the case; for he decidedly says, "that although in all the examinations which he has made of transverse fractures of the neck of the thigh bone, entirely within the capsular ligament, he has never met with an instance of bony union, or one where there was not motion of one end of the bone upon the other; yet he does not deny that, under peculiar circumstances, such union may be possible when the bone is broken, without the periosteum being torn, and when the fracture is oblique, partly within and partly without the capsular ligament." Now, as in neither of the above cases do the gentlemen know the precise condition of the capsular ligament, no one has a right to conclude that these cases come under any other head than an exception to the general rule, which Sir ASTLEY particularly mentions, viz. where the ligamentous sheath, and periosteum of the bone, have not been lacerated, or in so slight a degree as not to prevent the necessary circulation in the head of the bone, to produce the formation of osseous matter.

WE have received a long letter from a Mr. LEWIS SAYLES, of Sheffield, respecting the "new surgical operation" on the teeth, which appeared in our 160th Number. The opinion we then expressed of that operation, remains unaltered; and we did not deliver it until we had ascertained that we were proceeding on safe grounds. If Mr. SAYLES can send us a drawing of the instrument, which he says he has occasionally used for many years, with some substantial testimony of his having used it before Mr. FAY'S instruments were deposited with the Society of Arts, we shall be disposed to award him the merit of originality to which he pretends. In the debates at the London Medical Society, and in the Westminster Hospital Report of the present Number, Mr. SAYLES may find the sort of information he seeks. It is not our business to puff Mr. FAY, or any other person; but, in the discharge of our duties, we shall not hesitate to award the palm of merit to the deserving man, whether English, American, or French, our motto being *palmam qui meruit, ferat*.

A poor sexton, in the North of England, complained a short time ago to a traveller, that trade was dreadfully bad: "not a burial, Sir, have I had for these six months." Bad times, surely; but the trade of the three sextons to UNDERWOOD'S Mausoleum having dwindled to nothing, our friend JAMES has resigned the spade to his trusty colleagues, DARWALL and CONELLY. Alas, poor COP.

Mr. STONE, a *reader* of lectures on midwifery, attended the Hole and Corner meetings, for the purpose of preventing THE LANCET from publishing lectures; not his lectures, we presume, as he daily *reads* to his class the manuscripts of the late Dr. JOHN CLARK.

A correspondent inquires, if we have our price, because we have not given reports, of late, from the Middlesex Hospital; the reply is, that our friend JOE told us he had nothing there to sell. Joking apart, the cases having been worth nothing which have been admitted there for some time past, we have not felt disposed to trouble our devils with printing them.

The following case may serve to illustrate the sort of *discipline* observed at that Hospital:—

Yesterday afternoon, (June 26th,) a grand "*set to*" took place in *one of the wards* of this Hospital, between Tom Russell and another "lad of the fancy"—both patients here. At the commencement, betting was even; but after the second round, Russell's opponent was the favourite, and 3 to 1 was readily taken by the dressers and nurses. The eighth round decided the point, and Tom was fairly thrashed; his antagonist having "queered one ogle," Tom was "floored," and, in the fall, BROKE HIS LEG. This is no joke.

Mr. BELL, in his clinical lecture of last week, recommended the pupils to take copious notes of all the cases alluded to by him:—"Gentlemen," said Mr. Bell, "*every facility* will be afforded you for so doing, and without such attention on your part, my observations will be of little avail to you."—It happens that Mr. Bell's ideas of note-taking, have undergone some change.—How long have such facilities been afforded?

LONDON MEDICAL SOCIETY.

THE first meeting of the Society, for the present session, was held on Monday evening, the 24th of September.

Dr. CLUTTERBUCK, the president, announced to the Society, that during the last recess, the Council had been occupied with a subject of great importance to the Society, namely, the present state of the library. It had been found that the catalogue was in a very imperfect state; a revision of it had been made, and it was desirable that it should be printed; but not wishing to break in upon the regular funds of the Society, which would abridge the supply of new works, the Council thought it better to recommend that the necessary sum should be raised by the voluntary subscriptions of the members, and for that purpose a paper would be laid on the table for signatures. It is to be hoped that it will not be allowed to lie there long; as without such a catalogue, the literary treasures of the society are rendered almost useless.

The minutes of the last meeting having been read by Mr. FIELD, Dr. CLUTTERBUCK congratulated the Society on its prosperous condition, and expressed his conviction, that the present session would be as interesting as the preceding: and it would be in the recollection of the members, that the last session had been productive of more interesting and satisfactory discussion, than many of the former. In adverting to the more regular business of the Society, he observed, that no subject was more deserving their attention than the character of the prevailing diseases at the present period, as well as the state of the general health during the late recess. He saw many gentlemen present, who had extensive opportunities of watching disease, and he hoped that they would communicate the results of their observations, especially as during the autumn many diseases had assumed an epidemic character. By thus giving the results of their experience upon these subjects, whether orally or in writing, they could accomplish the essential objects of the Society. The question of contagion should not be lost sight of, as it was one of great importance, on account of its influence on treatment, and was as yet far from being settled; it was deserving therefore a thorough investigation, and the opportunities afforded to pathologists for making inquiries, were far from being limited. It was not to be forgotten that the healing art was, and probably ever would be, progressive; it was never likely to attain perfection, but we had a right to expect that something should be continually added to the store. By the joint

aid of observation and experiment, we were gradually penetrating the dark recesses of the animal economy; physiology was on the advance, and with it of course pathology, and the principles of medical science; for in proportion as we arrived at a more intimate acquaintance with physiology, we acquired a better knowledge of the nature of diseases, and, what must follow as a necessary consequence, a more successful method of treating them.

Among the improvements in physiological science, he would read to the Society some ingenious experiments that had been made on the brain, by Dr. Hertwig, of the Veterinary School of Berlin; for an account of which the public were indebted to one of our medical periodicals:* as it was to be regretted that the knowledge of the German language was very limited in this country. They had led to the most important conclusions, which the President then read to the Society. The important bearing of the facts deduced from these experiments upon pathology, would easily be seen; and if experiments upon living animals were ever justifiable, it was in cases where they were so well conducted as in the hands of Dr. Hertwig, and from the light they tended to throw upon diseases and their treatment in the human subject.

Dr. Clutterbuck then mentioned the tract lately published by Professor Munro, of Edinburgh, "On Spasm of the Canals for the Passage of the Food, the Bile, and the Urine;" which (he said) had not yet, perhaps, reached the Society. It was one of high interest in a physiological and pathological point of view: its main object was to show, which it did to him satisfactorily, that not only the alimentary canal, but the biliary and urinary passages were possessed of muscular contractility, however difficult it might be to demonstrate a distinct fibrous or muscular structure. If that point could be satisfactorily established, it must tend to lessen the difficulty felt by many in admitting the muscular powers of blood-vessels; a point in which the general doctrine of the circulation was deeply involved, as well as a considerable number of diseases. He next observed that he had a subject to mention, which he had no doubt would excite considerable interest among the Members; it was the account of a new medical doctrine which had sprung up in the German Universities, and which appeared to be extensively diffused throughout Germany and some of the neighbouring countries. It originated with a Dr. Halnemann, a physician of Leipzig, about thirty years ago, and was called Homœopathia; a term derived from the Greek, as it was the leading dogma of the doctrine that diseases ought to be combated by means which excite actions similar to the disease to be removed. There was much ingenuity, and probably some truth, in the doctrine, fanciful as it might appear at first sight. It rejected the maxim that *contraria contrariis curantur*, and substituted the opinion that *similia similibus curantur*; for example, diarrhœa was to be cured by purging, and it was known that purging was generally the most effectual remedy: that fevers were to be cured by stimulants, of course referring to the action of sudorifics, and so on; but, as he had been favoured with an *exposé* of the doctrine by a gentleman then present, Mr. Spry, who was well versed in German literature, he should defer saying any thing more of it until a future occasion.

During the recess another subject of some importance had occupied his attention, namely, the French practice of administering grain doses of tartar emetic, every four hours, as the principal remedy in cases of inflammatory diseases.

He had entertained some doubts, whether the two preparations of antimony, used in the two countries, were alike; but having procured, through his nephew, Dr. Woodforde, some of the French preparation from an eminent chemist in Paris, he had found that, as regarded their sensible effects, they were perfectly identical. He had tried this remedy in grain doses, administered every four hours, in about one hundred cases, with the following results: In some cases, the two or three first doses vomited; in others, it acted also on the bowels, producing vomiting and purging; after which, there was no further apparent action. As to its diaphoretic quality, it was difficult to determine whether it possessed any considerable power in that respect: although antimony had, from time immemorial, been extolled as a diaphoretic, and had acquired the name of febrifugum magnum; yet he was not prepared to say, that it possessed any such efficacy, as it was well known that the tendency of many diseases, was to terminate naturally in that way. As a substitute for bloodletting, for which purpose it had been extensively used by the French, he could not, therefore, recommend it.

There was a subject of considerable interest, which he begged leave to introduce to the notice of the Society; and although a minor branch of surgery, it was of considerable importance, on account of the object it was designed to accomplish, namely, the removal of a very common and distressing affection, the tooth-ache. He alluded to the operation of cutting off the crowns of diseased teeth, as proposed by Mr. Fay, in those cases of tooth-ache in which drawing the teeth had

* See Lancet, No. 160, vol. x. pages 317 and 318.

hitherto been deemed necessary; and from all he had heard of that operation, it appeared to him capable of accomplishing the proposed end, in a very satisfactory manner. But as he saw some gentlemen present, who, he believed, had seen the operation tried, they would, perhaps, favour the Society with their observations on the subject. He mentioned these topics to show that there was no lack of matter to engage the attention of the Society, and hoped that the members and visitors present, would communicate their opinion without reserve

The Society was, for the remainder of the evening, occupied in discussing the merits of Mr. Fay's operation.

Mr. Spry said, that he had seen Mr. Fay cut off a carious and painful tooth for the wife of a solicitor, a patient of his, and that the operation occasioned no pain; it was the first bicuspid tooth, of the left side, in the upper jaw. It was about six weeks ago; and by a letter he had received from the husband of the lady, then in the country, he had learnt that she had not experienced the slightest uneasiness since the operation.

A Member then observed, that this could not be deemed a new operation, as the dentists of this country had been in the habit of filing teeth, and that it was a common case to break off a tooth, in attempting to extract it, that as to the stump left in the jaw, it was generally found to produce great inconvenience, and was obliged to be drawn.

Mr. Spry replied, that there appeared to him an essential difference between the modes of removing the carious part of a tooth, mentioned by the last speaker, and that adopted by Mr. Fay; as the jar of the stump in the operation of filing, to say nothing of the injury usually done to the soft parts, was sufficient to excite the mischief complained of. That as to the cases in which the necks of the teeth had been broken off, in the rude attempts to extract them, which were usually made with the key instrument, it was fair to infer, that a still greater injury must be done to the membrane serving as the periosteum to the fangs of the tooth, and consequently after-inflammation was a very probable result: whereas, by excising the diseased tooth at its neck, by any mechanical contrivance which would not disturb the membranes and vessels connecting the roots to their sockets, it was fair to suppose that these structures would continue to receive their due share of nutrition, and remain perfectly inoffensive, if it could not be shown that they were productive of some good. If, as he believed, they were capable of affording the necessary support to the adjoining teeth, not only by their mechanical resistance, but by their preventing the absorption of the alveolar process of that part of the jaw, he thought that a very important discovery had been made in this branch of surgery. He believed that it was only necessary to appeal to the experience of every one who had allowed teeth to be extracted, to decide whether, in the course of some years, the neighbouring teeth had not much approximated, and whether that falling towards each other of the crowns of the teeth might not go on until such teeth should fall out; although, from the little attention heretofore paid to the subject, the fact of teeth having fallen out had been seldom traced to such a cause as the absorption of the alveolar process of that part of the jaw, before occupied by the stumps of the removed tooth, and the consequence of extraction.

Mr. Kingdon asked whether it was Mr. Fay's design to cut off the crowns of all painful teeth? as he had had a tooth plugged by a dentist many years ago, which was at that time very painful, and the dentist told him he had scraped out the whole of the cavity containing the expansion of the nerve in the tooth, and that it had remained since very useful; he wished to know, therefore, whether that practice was resorted to by Mr. Fay first?

Mr. Spry asked Mr. Kingdon whether, from a consideration of the figure of the common cavity of the tooth, he considered that it was possible to accomplish that, which the dentist had informed him he had achieved, admitting that the extreme sensibility of the delicate nervous structure occupying it, would have allowed of the introduction of any such scraping instrument? It was more reasonable to suppose that the caries had extended through the body of the tooth, until a thin plate only of the bony structure intervened between the cavity and the air, by which painful impressions were easily made on the nerve by sudden differences of temperature, and that the dentist had carefully scraped out such a cavity, and plugged it. He believed that the cavity alluded to being once absolutely opened by disease or accident, produced excruciating pain, and would not allow of the pressure of any foreign body into it. Mr. Fay's operation was intended to remove the tooth below this cavity, and that only in cases where, as he understood, the tooth could not be saved by plugging.

Dr. Blake mentioned a remedy for toothache, which we did not distinctly hear.

Mr. Langstaff, Mr. Chevalier, and Mr. Ray, took an active part in the discussion, but adduced no facts, either in favour or against the operation.

Mr. Fay was, at the suggestion of one of the members, requested to attend the next meeting.

At the second meeting of the Society, on Monday, (Oct. 2,) the discussion respecting the excision of teeth was renewed, Mr. Fay being present, at the invitation of the President. This gentleman very kindly brought his instruments, and a variety of preparations of teeth, for inspection.

Mr. Fay stated he had practised this operation for seventeen years; and that its origin was the result of accident. After teeth had been accidentally broken off in attempts by different persons to extract them, he had frequently observed, that instead of any unpleasant effects ensuing, benefit rather was derived. There were undoubtedly many cases in which excision was improper, and where extraction only, was practicable; as in cases where the socket or root was diseased. One curious circumstance Mr. Fay mentioned, which is deserving of notice; namely, that the canal in the centre of the tooth becomes filled with ossific matter, after the crown has been excised. Now this admits of an important practical application. If the tooth excised be one of the *incisores*, and if it should be necessary to apply an artificial tooth soon after, a *stylette* or *pivot* should be inserted immediately after the crown of the tooth has been excised; otherwise the canal becomes obliterated; and for this purpose he generally used a small piece of wood, as hickory. In this way the deposition of bony matter, and consequent obliteration of this canal, would be prevented.

The *possibility* of ossific matter being deposited, was here brought in question by some members, and among others by Mr. Langstaff. This gentleman considered the teeth of adults *inorganic*, for he had never been enabled to inject them, and hence he was unable to conceive how bony matter could be deposited. This objection, however, was soon overruled. Mr. Wade, who was present, had one of his teeth excised, and the canal within the tooth had become obliterated by the deposition of bony matter.

One of the members asked why ossific matter was deposited in the canal of excised teeth? as this was not observed in teeth which had been accidentally broken.

Mr. Fay replied, that whenever a tooth had been broken by attempts to extract it, its vascular connexion with the alveolar process had been broken, and hence the deposition of ossific matter could not occur.

Mr. Fay then showed his instruments for excision. He stated, that he never had occasion to remove the fangs of a tooth which he had excised. After excision, he plied the cajuput oil on a little cotton wool.

Mr. Fay's extracting forceps are somewhat similar in shape to his excising forceps. Instead, however, of laying hold of the crown of the tooth, Mr. Fay's method is to lay hold of the neck and the upper part of the fangs, so that he could as easily extract a tooth which had been excised, as one which was whole. The extracting forceps were of different shapes, according to the shape of the tooth to be operated on. Some of them had small projecting points from the inner side of the beak of the instrument, and which were intended to fix between the fangs of the teeth.

Mr. Fay then showed to the Society his new method of stopping the teeth. The metal he used was apparently some kind of amalgam (which melts at a low temperature). A small piece of it being placed in the tooth, an instrument slightly warmed by a spirit lamp was then applied to the metal, which was sufficient to melt it, and thus the hole was filled with the metal.

In answer to a question put to him by a Member of the Society, Mr. Fay stated, that he had never observed any part of the fang of a tooth which had been excised, become absorbed; and he accounted for it by the circumstance of the nutritient vessels being undisturbed and uninjured in the operation.

Dr. Blake here stated, that excision was unnecessary. He was enabled to cure the most desperate cases of tooth-ache (unless the disease was connected with rheumatism,) by the application of the following remedy to the decayed tooth:

Alum, reduced to an impalpable powder, two drachms;

Nitrous spirit of ather, seven drachms;

mix, and apply them to the tooth.

Mr. Fay admitted, that in 95 cases out of 100, where surgeons and dentists were applied to for the purpose of extraction, relief might be obtained without extraction or excision. The first point was to inquire if the tooth could be plugged; secondly, if it could not be plugged, to examine if the roots were healthy, as in that case excision could be safely performed; if the roots or sockets were diseased, extraction became absolutely necessary. In the cases in which the tooth could be saved by plugging, he observed that he frequently obtained temporary relief for the patient by applying a little of the oil of cajuput on cotton to the hollow tooth, directing a little castor oil, or some mild aperient to be taken; and when the pain had been thus relieved, he recommended the tooth to be plugged, as the most effectual way of preventing its recurrence.

The President thanked Mr. Fay for the candid manner in which he had answered the inquiries of the Society, observing, that he considered the explanations afforded very satisfactory.

HOSPITAL REPORTS.

HOSPITAL OF SURGERY,

Panton Square, St. James's.

STRICTURE OF THE ŒSOPHAGUS.

Mary D——, ætat. 32, (May 3,) complains of a sense of tightness and slight pain in the œsophagus, attended with great difficulty in swallowing. She can take nothing solid, and at particular times, fluids will scarcely pass. The sense of tightness is felt immediately below the os hyoides, and is always worse towards the latter part of the day. She constantly spits up a quantity of viscid mucus. On examining the neck, both lobes of the thyroid gland are considerably swollen, but not the least painful to the touch; nothing unnatural is observed on looking into the mouth. She is very much emaciated, but suffers little or no pain. Bowels deranged; pulse very small and feeble.

She states that six years ago, the swelling of the thyroid gland came on without any known cause, and increased to the size of an orange. Leeches and fomentations were applied, and it gradually diminished to its present state. The swelling of the gland was not attended by any of the present symptoms. Three years ago, after an affection of the liver, she complained of a soreness of her throat, which continued to give much inconvenience, although frequently relieved by leeches, until the last three months, when the tightness and difficulty in swallowing commenced.

She has had a small bougie twice passed down the œsophagus, and she eats without much difficulty.

6. Since she came to the hospital, several attempts have been made to pass a small elastic bougie, but without success. The point at which the obstruction is met with, is immediately at the commencement of the œsophagus. A piece of plaster spread with the ex. of belladonna has been applied to the neck.

8. Yesterday a bougie armed with caustic was introduced, and allowed to remain for some time in contact with the obstructed part; at first it produced considerable irritation, but in a hour or two after, she imagined that she could swallow somewhat easier. General health is improved.

12. The armed bougie has been repeated twice since the last report, and yesterday a small bougie passed the stricture with considerable facility. Bowels costive; tongue white.

℞. *Submur. hydrarg.*, gr. iij.;
Nocte sumend.

20. The bougie has been frequently passed, although sometimes with much difficulty; her swallowing is decidedly improved, and she can now get over small pieces of bread, steeped in milk. A bougie, with its point besmeared with the extract of belladonna, has been frequently passed down to the stricture, but without any marked benefit. To take the *calomel*-powder occasionally.

26. Since last report, she has been in the habit of passing a small bougie herself down to the stricture, but has been unable to get beyond it. The difficulty in swallowing continues much the same, but her general health is very much improved.

A small seton to be made on each side of the larynx.

GROWTH OF THE NAIL INTO THE FLESH.

John K. ætat 21. (June 23.) The integuments of the distal phalanx of the great toe of the right foot are much inflamed and swollen, and extend over the nail on each side, so as to leave but a small portion of its centre uncovered. The toe is exceedingly painful, and gives great inconvenience in walking. Says that, about two years ago, he observed that the nail was growing into the flesh, in consequence of which he cut it short, and since then has been in the constant habit of paring and scraping the nail, which has invariably increased the pain and swelling of the integuments. The soft parts to be touched with the nitrate of silver.

July 20. The lunar caustic has been applied on each side of the nail twice a week since he came to the hospital, with decided relief; the swelling and inflammation of the toe have very much subsided, and almost the whole of the nail is now visible. Suffers little or no pain, and can walk without inconvenience.

GROWTH OF THE NAIL INTO THE FLESH.

G. H., ætat 16. On the right side of the nail of the great toe the integuments are inflamed and swollen, so as to overlap the edge of the nail, and he cannot bear the part to be touched. It is two months since the toe began to be painful, and he has since pared the nail occasionally, which, instead of relieving, has invariably increased the tenderness and swelling of the soft parts. The lunar caustic has been applied every third or fourth day during the last fortnight, and the flesh of the toe is now almost of its natural appearance and form; he can also walk without inconvenience.

WESTMINSTER HOSPITAL.

THERE are, at present, several interesting cases in this Hospital. A woman, in the fifth month of pregnancy, jumped out of a third floor window, and fractured both legs. The patient is doing well: no miscarriage has happened, nor are any symptoms present which lead one to expect such an occurrence.

The case of compound fracture of the carpal and metacarpal bones of the right hand (noticed in Number 159, vol. x.), is rapidly getting well. Portions of the unciform and of the ulnar bones were removed: the loss of substance has been restored by healthy granulations; the patient is now on a liberal diet, and bids fair to be well in a few weeks. A question was raised at the time of his admission, whether amputation should be performed or not. Mr. Guthrie very properly decided on trying what could be done by appropriate management, and the man has saved an useful hand and arm.

OPERATIONS.

For some time past great expectation had been excited that the operation of lithotomy would have been performed on Saturday; consequently a considerable number of persons assembled to witness what, at the Westminster, is a rare operation. Mr. White was to have been the operator, but could not, after repeated attempts, detect satisfactorily the presence of a stone. Mr. White asserted most positively that he had felt a stone a few days ago, and appealed to Mr. Lynn, sen. for a confirmation of the fact. Mr. Lynn said he had heard the sound strike against a stone. Mr. Guthrie affirmed that he could make oath to having felt it also, most distinctly, only a short time since. Why may it not be felt now? asked Sir Anthony Carlisle; taking the sound in his fingers, and finding that he could not turn it about very readily, said, "Mr. White, I think that the sound is not in the bladder." "Do you think not?" asked Mr. White. "I do, indeed," responded Sir Anthony. Mr. Guthrie tried, but he could not satisfy himself that the sound was in the bladder; nor did he appear to get it there. After repeated attempts with sounds of various sizes, until almost all Mr. Stodard's stock had been used, it was at length humanely advised, by Sir Anthony, that all further attempts should be desisted from, and that the child should be brought up again in a fortnight.

This was a great disappointment to Mr. White, as he had been in the dead-house practising some time, and came quite prepared for the exhibition of surgical skill. While the postponement was agreed to by Messrs. White and Guthrie, and Sir Anthony, Messrs. Lynn, junior and senior, were occupied in talk about the bread and cheese chance of making a living by lecturing, since the rescinding of the late by-law, so they had nothing to say. Whether Mr. Stodart does keep sounds and staffs fit to enter the bladder, or not, we shall not determine; suffice it to say, the surgeons present could not find a stone, and could not determine whether the instrument was passed into the bladder or not. Now the fact is, the sound was at first put into the bladder, and the urine escaped; the bladder of course contracted. A child's bladder, in a contracted state, is not very large; not large enough to allow a man to twirl about a sound or catheter in the ends of his fingers, as when introduced into the distended bladder of an adult. The want of considering this circumstance caused all the confusion. The operation was performed last Saturday, by Mr. White.

The students having been for some time past desirous of seeing the operation of excising the crown of a diseased tooth performed, Mr. Guthrie requested Mr. Fay to come to the hospital to operate. A man happened to be present who wished to have his tooth extracted, and being a fair case, Mr. Fay performed the operation of excision. The man, who was about twenty-one years of age, declared, that the pain in the tooth immediately ceased; and that the operation, although it gave him a "funny snap," was not painful. Mr. Guthrie repeatedly asked the man whether he felt any pain in the jaw or neck; he said, "No, not the least." He was desired to call again, which he did several times, and uniformly declared that he had not felt the least uneasiness since the operation, which was performed about a month ago. We abstained from mentioning the case before, to see if the result would be favourable. The surgeons and pupils at the Hospital were highly satisfied with the "New Surgical Operation."

Several serious accidents have been recently admitted. A case of compound fracture of the thigh was admitted on Saturday last.

BARTHOLOMEW'S HOSPITAL.

CASE OF STRANGULATED INGUINAL HERNIA.

On Thursday a man named John Starling, æt. 22, came into Baldwyn's ward about noon, labouring under obstruction in the bowels for the space of a week, and a small tumour in the left groin.

The patient had always been subject to a rupture on that side; eight days before he had been running, and was suddenly affected with violent sickness and vomiting,; these symptoms, in a short time, abated; he had not felt any increase in the size of the tumour in the groin, after that occurrence, but his bowels had been obstinately immovable since that time. When the groin was examined, there was an appearance and feeling, as though the spermatic chord was thickened; but in so slight a degree, as scarcely to substantiate the idea that any hernia existed; he did not complain of pain on pressure of the part, neither were the symptoms those of active strangulated hernia; he had neither hiccup nor vomiting. Presuming, however, that there must be some protrusion, he was placed in the warm bath, and bled to ℥xxx.; after which the taxis was employed, but without any sensible diminution of the supposed protrusion. An enema was thrown up, but speedily rejected. Three grains of calomel, and ten of jalap, were then given him, and ordered to be repeated, if necessary.

At five o'clock in the evening, the calomel and jalap not having operated, he was ordered to take a fourth part of the following mixture every hour, until it should operate; viz. croton oil gtt. iv, sugar ʒi, and mint water, ℥ij; if this produced no change, the warm bath was to be repeated early in the morning, and another attempt at reduction made. If these means should fail, Mr. Vincent said an operation would be indispensable. During the night, and on the following morning, Friday 14th, the symptoms took the character of those of acute strangulation; he had been very restless all night, complained of considerable thirst; his countenance was expressive of considerable anxiety, he had had frequent vomiting, especially on taking any thing into the stomach, and hiccup; his tongue was furred, his pulse small, quiet and hard, and a profuse perspiration covered his body; he had considerable tension of the abdomen, and pain on pressure of the region of the pubes, and situation of the spermatic chord; he had had a scanty evacuation, (probably from the large intestines only,) the warm bath and taxis had been used without effect.

At half past one o'clock, Messrs. Lawrence, Earle, and Stanley, having given their opinion as to the necessity for the operation, although they were doubtful as to the exact nature of the case, the patient was removed to the operating theatre, when Mr. Vincent proceeded to divide the skin and superficial fascia, to the extent of about three inches, and, afterwards, to dissect down to the sac, which he opened. On opening it the testicle was seen at the bottom of the sac, whilst the upper part contained a portion of omentum, and a small knuckle of intestine; the omentum was firmly adherent to the neck, as well as to part of the body of the sac, and was changed in appearance, being much thickened and consolidated, having evidently formed the contents of the congenital hernia, which the man spoke of on his admission. The small portion of intestine consisted of a portion of jejunum or ileum, about two inches a half in length, and was considerably discoloured; on feeling for the place of stricture, Mr. Vincent ascertained that it was confined solely to the boundaries of the internal ring; he then divided the stricture with a probe-pointed bistoury, liberated and returned the intestine, and afterwards separated the connexions of the omentum to the body of the sac, cutting off the protruded portion about three inches in length, close to the neck, leaving the remaining portion adherent to the canal; he closed the wound by adhesive plaster, and, in the centre, by a suture, applying over the whole a compress of lint. A few hours after the operation, an enema was thrown up, but rejected almost immediately; and small doses of sulphate of magnesia administered, but without effect. The dresser then gave him ʒvj. of castor oil, which was rejected; and, afterwards, three grains of calomel, and ten of jalap. In the evening, the pulse being 110, and possessing considerable hardness, he was bled to ℥xx.

15. The medicine of last night opened the bowels freely, he had several copious evacuations, passed a restless night, complained of great thirst, tongue covered with a brown fur, pulse 100, hard, and of a jerking feel; had pain on pressure of the abdomen, but principally on the side, as in the neighbourhood of the wound, which we examined, and looked healthy. He was bled to ℥xviij. this morning, and took the saline medicine. Mr. Vincent ordered the saline medicine to be continued, with the addition of the liq. ant. tart., and gr. viij. hydr. c. creta, every three hours, and a bread and milk poultice to be applied. Evening: the tension and pain of the abdomen increased, tongue coated with a brown fur; pulse 100, and hard; bled ad ℥x.

16. The patient passed a very restless

night, pain and tension not at all alleviated; vomited a considerable quantity of dark, green-coloured matter; countenance expressive of great anxiety, tongue furred, pulse 98, has great thirst. Mr. Vincent ordered leeches xx. to be applied to the abdomen; the saline medicine with the tartarized antimony to be continued, and the hydr. c. creta. grs. x., every third hour; the wound in a state of suppuration. Evening: there being no diminution of the symptoms, save of pain, a large blister was applied to the region of the pubes.

17. Pain of the abdomen nearly gone, and great diminution of tension; the countenance has in a great measure lost its anxious expression, the bowels open, tongue cleaner, but parched; pulse 100; the two latter symptoms would have indicated further depletion, but from the excessive general weakness, and the subsidence of the local symptoms of inflammation. Mr. Vincent said, he should merely continue the saline medicine with antimony, and the hyd. c. creta. Evening: the patient is very restless and uneasy, and countenance expressive of anxiety.

18. A visible alteration for the worse; had a sleepless night, complained of great thirst, laid motionless, eyes dim and fixed, with mouth half open; features sharp, and his articulation difficult and indistinct; tongue brown, and furred; pulse 108, and sharp; the local symptoms of inflammation have completely left; could bear pressure on the abdomen, without uneasiness. Mr. Vincent desired that the dose of hydrg. c. creta. might be increased, and the saline medicine be continued with the antimony. He gradually sunk, and died in the evening.

Post-mortem Examination.

Upon opening the cavity of the abdomen, the intestines were seen filled with flatus, tightly braced down by the omentum, which was firmly adherent at the inguinal canal, and also to the small intestines, with which it had been in contact. The omentum itself presented marks of considerable inflammation; the portion of intestine protruded, had been the lower part of the ileum, it was of a very dark livid hue, approaching to black, and highly vascular. The internal mucous lining of that part of the intestine, had undergone no change whatever from its healthy condition. There were traces of inflammation on the whole of the small intestines, not extending round the circumference of the intestine, but in longitudinal patches, seemingly in those parts with which the omentum had been in contact; but these were slight, with the exception of that part of the ileum near the strictured portion for the space of six inches, which presented marks of active inflammation in the whole of its circumference.

A peculiarity of formation, which could have no reference to the disease, was observable in the gall-bladder; it was considerably longer than usual, and its greater circumference was reversed, being larger above than below, about the middle of the bladder was a kind of hour-glass contraction dividing it into two parts. It was filled with bile, but of a less viscid quality than usual; its colour also was not so deep, the internal lining of the bladder not being stained, but of a whitish colour; the duct was not obstructed.

CASE OF PHAGEDENA GANGRENOSA.

On the 21st of July, a woman named Mary Brown, ætat. 30, was admitted into Magdalen Ward, with sloughing phagedena of the right labium. On seeing her, Mr. Lawrence inquired of her from what part of the town she came, observing at the same time, that almost all the patients admitted into this Hospital with sloughing phagedena, came from a place named Swan-alley, near East Smithfield, which was the haunt of a most wretched and miserable set of women, who, in the exercise of their vocation, were devoted to the service of sailors and Lascars Her answer confirmed his observation, as she actually came from the above-mentioned Swan-alley. She said, that whilst affected with gonorrhœa, the disease first made its appearance, five weeks previous to her admission, in the form of a pimple or small boil; the pimple afterwards vesicated, and had gradually progressed and acquired its present magnitude, three inches in length, and rather more than one in breadth. The surface of the sore now presents an irregular appearance; is covered with a fœtid, pulpy, and thick slough, with a dark brown discharge: around the sore, which is oval, is extended a circumscribed thickening, with a dark red halo of inflammation; to this is added a puffy and less limited tumefaction of the cellular substance. The edges abrupt, of a deep red colour, were, as well as the surface of the sore, dotted on the inner surface with numerous small, elevated, and angry-looking points, which, according to Blackadder,* may be considered as one of the characteristic marks of the disease; from these an occasional oozing of blood took place. On approaching the patient, that peculiar and fœtid odour always attendant on the frightful progress of this disease, was very annoying: the whole of

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* See Blackadder's Observations on Phagedena Gangrenosa.

the right labium was destroyed. Contrary to our own experience in the disease in eight or ten cases, and to the dicta of Messrs. Blackaddder, Delpech, Hennen, Thompson, Ponteau, and Welbank (all of whom describe the darting, progressive, though intermittent pain, as a constant symptom), the patient had never felt pain except when the diseased parts were put on the stretch. In the eight cases detailed by Mr. Welbank in the xvth vol. of the Medico-Chirurgical Transactions, the darting pain was a never failing symptom; indeed, in the case of Samuel Cooke, page 331, it led him to anticipate the disease. She slept well, and her general health had not been much disturbed: her pulse did not exceed the natural standard in frequency: her tongue clean, and her appearance, generally, not indicating any indisposition, no expression of anxiety, no haggard look. Mr. Lawrence desired the pupils to remark the well-defined edges of the sore, its putrid and spongy sloughing surface, and the copious and very fœtid discharge which issued from it, as well as the bleeding points. He remarked that, in this species of ulceration, when the constitution was unaffected, any general treatment was unnecessary; that the local application of concentrated nitric acid was, in almost every case, sufficient to produce a healthy surface, which healed up without any trouble. The application of the acid was ordered, after which the slough was to be covered with dry lint: one grain of opium to be given shortly afterwards, and to be repeated at bed-time. The hair having been shaved from the parts around, the surface of the sore cleansed, and the surrounding parts protected by a thick coating of lard, the dresser having previously immersed some lint in the concentrated acid, proceeded to apply it, and to press steadily upon every point of the diseased surface until it appeared converted into a firm and dry mass. The woman did not express any pain whatever: did not cry out during the application.

22. The application of the acid had not produced its usual beneficial effects; the sloughing ulceration still proceeding, and the sore considerably deepened. The patient passed rather a restless night, but continued free from pain: the acid to be again applied.

23. The patient appeared much the same; the slough had come away; the edges of the sore were well defined, and healthy; the inflammatory appearances in its vicinity were much diminished; the sore itself, in its upper and outer parts, presented the most healthy granulating surface, but, at its lower and inner parts, still retained the decided phagedenic character—dark putrid surface, and fœtid discharge. Mr. Lawrence observed that the acid had not produced its usual beneficial effects; that, in the cases which had come under his notice, a single application had generally been effectual, and yet it had been applied twice in this case, and the disease was still proceeding in its career in part of the sore: he, however, ordered the re-application of the acid to those parts of the sore still retaining the original character, and the opium internally.

26. Instead of an improvement in those parts of the sore to which the acid had been applied yesterday, they seemed to be considerably deepened; the remaining parts of the sore presenting large and florid granulations. Mr. Lawrence said, that as he had given the acid a complete trial without success, he would try the external and internal use of opium; he ordered a piece of lint wet in the liquor opii sedativus, to be kept constantly applied to the sore, and five grains of the pil saponis c. opio, every fourth hour. This plan of treatment was persevered in until the 31st; on the 30th, the ulceration appeared to be deepening in one part of the sore; and on the 31st, there was a circular excavation, about the middle of the sore, of considerable depth, into which the end of the thumb might have been placed; the circumference still presenting a most healthy surface, Mr. Lawrence again reverted to the acid and dry lint, with opium internally; and, on the 3d of August, the spongy sloughs having been cast off, the whole presented a healthy granulating surface.

August 6. The sore has diminished in size one-third, and is filling up very fast; her bowels had been in a relaxed state for the last ten days, which had been combated by the mist. cretæ comp.; her tongue, during that time, had presented a preternaturally red appearance; the general health but little affected, with the exception of slight febrile symptoms. August 9th, the sore almost filled up, and diminished to one-fourth its original magnitude.

September 20. Patient is now quite well.

CASE OF PHAGEDENIC ULCERATION OF THE PENIS.

On Thursday, 3d of August, ——, æt. 50, was admitted into Lazarus Ward. Mr. Lawrence saw him on the 4th. On examination, the penis was found to be enlarged to twice its natural size, with considerable hardness and inflammation. A chancre, about the size of a small horse bean, was discovered in the situation of the frænum, and a bubo on the left groin; the chancre had existed for the space of five weeks, and, at this time, its surface presented a very foul dirty appearance, with a thin acrid discharge, approaching nearly to the phagedenic character; it had completely destroyed the frænum. Mr. Lawrence observed,

that the appearance which the chancre had taken was very unfavourable, and that it was of a nature which would speedily destroy the end of the penis, if active and decided measures were not adopted; he said, although he considered the ulcer to be a venereal chancre, yet he thought its present foul appearance depended, in a great measure, on the very inflammatory state of the penis, and that general depletion would be proper in the first instance; he therefore ordered ℥xvi. of blood to be taken from the arm, 12 grains of jalap, and 4 of calomel to be taken immediately, and a dozen leeches to the penis in the evening; he desired the prepuce might not be withdrawn, but the sore be kept clean, by syringing the part with warm water at intervals.

5. The inflammatory state of the penis not at all diminished; the sore, which still retains the same character, has increased to twice the size, extending from the glans itself to that portion of prepuce which was in contact with the original sore: there is but little pain. Mr. Lawrence now thought the best way to retard the progress of the disease would be to affect the constitution with mercury in as short a time as possible. He ordered a piece of lint, wet in the black wash, to be applied to and left between the opposing surfaces of the sore; two grains of calomel, and one-third of a grain of opium, to be taken every six hours; and one drachm of blue ointment every night rubbed on the inside of the thigh.

6. The man slept well: pulse natural, and tongue clean; very little pain in the part; mouth not at all affected by the mercury. On examining the penis, it appeared considerably lessened in size; its inflamed appearance, in a great measure, gone, the sore itself not extending, and its character decidedly changed for the better: its colour by no means so dark, and its upper part clean, and exhibiting a healthy appearance. Mr. Lawrence said it was rather difficult to decide upon the treatment in cases of this kind: should the ulceration not be venereal, but merely caused by irritation depending on excessive inflammatory action going on in the penis, the antiphlogistic treatment would have been sufficient; but were it a chancre that had taken on the phagedenic character, it was most important to exhibit mercury freely, and affect the constitution in as short a time as possible, in order to put a stop to the rapid progress of the disease, which would otherwise destroy a great part of the penis. He said he considered this case to come under the latter head, and remarked the beneficial effects which the mercury had so speedily produced.

7. The man slept well, and has no pain, only a slight degree of soreness in the part: his bowels are open, his pulse natural, and tongue clean: the penis rapidly decreasing in size. The sore has still a foul, dirty look, discharging a thin brownish-white fluid, but at its upper part clean and healthy, in a greater extent than yesterday. Mr. Lawrence said it was considerably better, and he had not the least doubt the mercury which he had taken deserved the credit of arresting the progress of the disease. He had seen a number of cases of this kind, and been impressed with the speedy and decided benefit which mercury produced, in completely and rapidly changing the character of the ulceration, and converting it into a healthy sore.

9. The mercury had affected his mouth very decidedly yesterday morning, and he had omitted it since that time: the sore has assumed a healthy aspect in its whole extent; the penis nearly its natural size, and his general health good: the mercury was not persevered in any longer.

20. The sore is completely healed, but the man still remains in the Hospital, for a bubo which has suppurated.

CASE OF ELEPHANTIASIS, OR LEPRA ARABUM OF THE EAST.

Thomas Spencer, a man of colour, about 45 years of age, was admitted into this hospital on the 25th of February, labouring under the disease called elephantiasis. He stated at the time of his admission, that his skin first became diseased a few days after his quitting the West Indies, and that during the voyage to this country, it gradually got worse. It is now eleven months since the disease first broke out. For the last three months he has been a resident of Middlesex Hospital, where he had been somewhat benefited, but not being able to get his admission paper renewed, he was obliged to leave. When he came to this hospital, the face and hands were the only parts of the body diseased, except the feet, which had a slight scaly appearance. The cheeks were studded with small hard tubercles, more or less distinct, varying in size from a millet-seed to a large lentel: on different parts of the face, and particularly about the nose, lips, and eye-brows, the disease was further advanced, and had gone into a superficial state of ulceration; these patches of ulceration were very irregular, but most of them presented a healthy aspect. Two tubercles seated over the eye-brows, had suppurated, and the discharge being allowed to accumulate, two small conical projections had formed, very much resembling the tubercles of Rupia. The roof of the mouth, as well as the soft palate, were found studded with tubercles, similar to those observed on the face, and these also had here and there gone into a superficial

state of ulceration. The uvula is in great measure destroyed.

A kind of chronic inflammation of both sclerotices appears to have existed, at the same time implicating the cornea to a certain extent, as there existed an opacity of their ciliary margins, which gradually diminishes towards the centre of each membrane. Towards the outer angles of each eye, and more particularly that of the left, and beneath the conjunctiva, small fatty depositions or granules, are observable, resembling the affection styled *pterygium pingue*.

Neither the ears nor scalp were affected. Both hands were swollen, but in an inconsiderable degree, and in them the disease existed in both stages, as in the face. The body was quite clear.

A degree of atrophy of the virile organs (according to the patient's account,) had taken place, but no glandular enlargement, or "femoral tumour," as Dr. Adams styles it, existed. His bowels were regular; and he slept tolerably well at night. Tongue slightly loaded; pulse 80. He is ordered to take 5 grains of Plummer's pill, every night, and the warm bath each alternate day. Milk diet.

He continued under this plan of treatment for about three weeks, without any visible alteration in the character of the disease. A few days since he complained of great weakness, and he has, in consequence, been allowed meat diet without beer. Within the last few days, the superficial ulcerations, on the face, have been touched with a weak solution of the nitrate of silver. By the 23d of March, the tuberculated condition of the skin of the cheek had become diminished, and the ulcerations much improved. A few days subsequent to this, Mr. Lawrence was induced to try the arsenical solution; and the patient was, consequently, directed to take the following draught three times a-day, a purgative being previously given, as the bowels were rather constipated:—

Pimento water and
Distilled water, of each half an ounce;
Solution of arsenic, 5 minims. Mix.

He persisted in the use of this medicine for a week, when his stomach became irritable, and the system generally excited; it was therefore discontinued, and saline medicine substituted in its stead.

In the course of a few days, these unpleasant symptoms had completely subsided; the saline medicine was discontinued, and the bath ordered to be repeated, as before.

May 3. The ulcerations are gradually healing, and the tubercular eruption has diminished considerably. Within the last ten days, the glands in each groin have enlarged. The testes appear to have shrunk in size since the admission, but only in a very slight degree. The hands are much improved in appearance. Adhesive plaister is all that is at present applied to the ulcerated surfaces. Continue the use of the bath.

June 27. He has continued grradually improving, and is, on the whole, considerably better. The skin of the cheeks is almost entirely clear of all tubercles, and has now regained its soft and natural feel. A great portion of the ulcerated surfaces has cicatrized over; and this has been more evident since the application of the red precipitate ointment to the raw surface. The ulcerations in the mouth and soft palate continue, however, much the same, as do also the enlarged femoral glands. All he at present takes, is an occasional aperient; with the red precipitate ointment, as a local application.

July 18. The character of the disease has now considerably altered; the patient is much better, and although there still remains a few patches, Mr. Lawrence thought, from their healthy condition, that a little fresh air would be very beneficial. The patient was in consequence discharged.

OPERATIONS.—AMPUTATION ABOVE THE KNEE; AND HARE LIP.

On Saturday (Oct. 7), Mr. Vincent performed the operation of amputation above the knee. The patient, who is a young man about twenty-six years of age, has been labouring under a scrofulous enlargement of the knee joint for some months past, and all the ordinary modes of treatment proving ineffectual, the propriety of his losing his limb was pointed out to him, and he readily consented.

For what reason we don't know, but the operator chose to adopt the double flap method, instead of the circular incision: perhaps it was intended as a show off; or, as Mr. Carpue would say, *a flash in the pan*, to let the *virides* see that such things can be done.

Since the operation the man has gone on very favourably, and the stump is fast granulating. (On examining into the condition of the parts after the limb was amputated, every morbid change usually met with in these diseases was observable: a considerable effusion of a curdy-like secretion, thickening of the synovial membrane, softening of the bone, and absorption of the cartilages.)

This was succeeded by a hare lip case, which was operated on by Mr. Earle. The subject of it was an infant, but a few months old. The case presented nothing unusual. We certainly have seen Mr. Earl operate more dexterously than in the present instance. One needle was introduced, and the ligature applied in a very neat manner.